



Oregon

John A. Kitzhaber, M.D., Governor

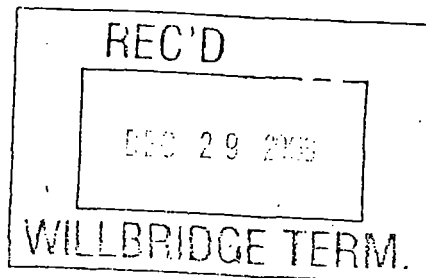
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Department of Environmental Quality
Northwest Region Portland Office
Air Quality Program
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5554
FAX (503) 229-5265
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Kinder Morgan Liquids Terminals, LLC
5880 NW St. Helens Road
Portland, Oregon 97210



RE: ISSUANCE OF OREGON TITLE V
OPERATING PERMIT # 26-2028
WILLBRIDGE TERMINAL FACILITY

The Department of Environmental Quality has completed processing your Oregon Title V Operating Permit renewal application and has issued the enclosed permit. This permit became effective when the Regional Air Quality Manager signed it. If you wish to appeal any of the conditions or limitations contained in the attached permit or if you have any questions, please contact George Yun at (503) 229-6093. If issues related to the permit conditions cannot be resolved to your satisfaction, you may request a hearing before the Environmental Quality Commission or its authorized representative. Any such requests shall be made in writing within 20 days of the date of this letter, and shall clearly specify which permit conditions are being challenged and why, including each alleged factual or legal objection. Permit conditions not contested shall be in effect upon the date the permit was signed (OAR 340-218-0220).

You are urged to carefully read the permit and take all possible steps to ensure compliance with the conditions established.

Sincerely,

Audrey O'Brien
Air Quality Manager
Northwest Region

GY/AOB:cab

Enclosure

Cc: DEQ, Air Quality Division
EPA Region X

USEPA SF



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OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT

Northwest Region
2020 SW 4th, Suite 400
Portland, OR 97201
Telephone: (503) 229-5263

Issued in accordance with the provisions of ORS 468A.040, 468A.300,
and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Kinder Morgan Liquids Terminals, LLC
5880 NW St. Helens Road
Portland, OR 97210

INFORMATION RELIED UPON:

Application Number: 020469
Received: 12/31/2002

PLANT SITE LOCATION:

Linnton Terminal:
11400 NW St. Helens Road
Portland, OR 97231

LAND USE COMPATIBILITY STATEMENT:

From: City of Portland
Dated: 4/19/1995

Willbridge Terminal:
5880 NW St. Helens Road
Portland, OR 97210

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY


Audrey O'Brien, NW Air Quality Manager

Date DEC 17 2003

Nature of Business: Special warehousing and storage facilities for hire

Primary SIC: 4226

RESPONSIBLE OFFICIAL:

Name: Mr. Eugene G. Braithwaite
Title: Area Manager

FACILITY CONTACT PERSON:

Name: Mr. Pete Murphy
Title: Area Manager
Phone: (503) 220-1254

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LIST OF ABBREVIATIONS USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit
acfm	actual cubic foot per minute
API	American Petroleum Institute
AQMA	Air quality management area
ASTM	American Society of Testing and Materials
bbl	barrel
Btu	British thermal unit
CAM	Compliance assurance monitoring
CFR	Code of federal regulations
CO	Carbon monoxide
CO ₂	Carbon dioxide
DEQ/ODEQ	Oregon Department of Environmental Quality
dscf	dry standard cubic foot
EF	emission factor
EPA	US Environmental Protection Agency
EU	Emissions unit
FBR	Free board ratio
FCAA	Federal Clean Air Act
ft ³	cubic feet
gr/dscf	grain per dry standard cubic foot
HAP	Hazardous Air Pollutant as defined by OAR 340-032-0130
HCFC	Hydro-chloro-fluoro-carbons
ID	Identification number
I&M	Inspection and maintenance
LPG	Liquefied petroleum gas
MB	Material balance
mg/l	milligrams per liter
MMBtu	Million British thermal units
mvac	Motor vehicle air conditioner
NG	Natural gas
NO _x	Oxides of nitrogen
O ₂	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
Pb	Lead
PCD	Pollution control device
PM	Particulate matter
PM ₁₀	Particulate matter less than 10 microns in size
ppm	Part per million
ppmv	Part per million by volume
PSEL	Plant Site Emission Limit
psig	pounds per square inch, gauge pressure
RACT	Reasonably Available Control Technology
RVP	Reid Vapor Pressure
scf	Standard cubic foot
SERP	Source Emission Reduction Plan
SIP	State Implementation Plan
SNAP	Significant New Alternative Policy
SO ₂	Sulfur dioxide
ST	Source test
VE	Visible emissions
VMT	Vehicle miles traveled
VOC	Volatile organic compound
VOL	Volatile organic liquid
WSPA	Western State Petroleum Association

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable and state enforceable except conditions 15, 16, 17, 18, 39, and 46 are enforceable by the state only. OAR 340-218-0060 and 340-218-0070]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units and pollution control devices regulated by this permit are the following [OAR 340-218-0040(3)]:

3.a. Fixed Roof Tanks (FIXTANK) regulated by this permit are the following:

FIXTANK Description	FIXTANK Device ID	Rated Capacity (gallons)	Year Installed
All fixed roof tanks at the <u>Linnton</u> Terminal	L305, L306, L309, L310, L312, L313, L314, L315, L326, L330, L331.	< 39,000	Pre-1926
	L532	< 39,000	1965
	L1033, L2024, L2502, L2503, L3034, L5004, L5025, L10007.	39,000 - 420,000	1910 - 1937
	L20011	856,506	1932
	L30016	1,253,784	1941
	L55008	2,288,832	1933
	L55021	2,324,490	1918
	L55023	2,312,016	1944
	L55022 **	2,309,286	Pre-1941/2001
All fixed roof tanks at the <u>Willbridge</u> Terminal.	W9, W10, W11, W12, W13, W14, W15, W16, W17, W18, W22, W23, W25, W30, W31, W32, W33, W34, W35, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W47, W48, W49, W50, W51, W56, W57, W58, W59, W60, W62, W63, W75, W76, W77, W82, W83, W93, W95, W96, W97, W98, W99, W109, W110, W111, W112, W113, W114, W115, W125, W126,	< 39,000	Pre-1960

** Fixed Roof Tank L55022 has been converted from an internal floating roof tank.

FIXTANK Description	FIXTANK Device ID	Rated Capacity (gallons)	Year Installed
All fixed roof tanks at the <u>Willbridge</u> Terminal.	W127, W129, W130, W131, W132, W145, W146, W147, W148, W150, W151, W153, W154, W155, W156, W157, W158, W159, W160, W161, W162, W163, W169, W170, W171, W172, W176, W177, W186, W187, W188, W189.	< 39,000	Pre-1960
	W135, W136, W193, W194.		date unknown
	W4, W6, W8, W74, W86, W87, W88, W89, W91, W92, W94, W102, W103, W104, W106, W137, W143, W173.	39,000 - 420,000	Pre-1960 except W173 installed in 1972.
	W2	3,095,400	1915
	W3	537,600	Pre-1960
	W5	424,200	Pre-1960
	W7	424,200	Pre-1960
	W52	3,154,200	1923
	W54	3,351,600	1924
	W64	840,000	Pre-1960
	W69	3,166,800	1937
	W70	1,411,200	1938
	W71	831,600	Pre-1960
	W73	529,200	Pre-1960
	W85	2,255,400	Pre-1960
	W100	3,171,000	1949
	W138 <i>change is now an internal floating roof</i>	554,400	Pre-1960
	W139	554,200	Pre-1960
	W140	604,800	1956
	W141	709,800	1956
	W200	3,780,000	future project

3.b. External Floating Roof Tanks (EXTANK) regulated by this permit are the following:

EXTANK Description	EXTANK Device ID	Rated Capacity (gal)	Year Installed
All external floating roof tanks at the Linnton Terminal.	L45028	1,889,538	1955
	L59029	2,454,060	1955
All external floating roof tanks at the <u>Willbridge</u> Terminal.	None	---	---

3.c. Internal Floating Roof Tanks (INTANK) regulated by this permit are the following:

INTANK Description	INTANK Device ID	Rated Capacity (gal)	Year Installed/modified
All internal floating roof tanks at the Linnton Terminal.	L11019	469,896	1941
	L17027	739,074	1954
	L11017	469,938	1941
	L2501	84,966	
	L17018	664,440	
	L17020	664,272	
All internal floating roof tanks at the <u>Willbridge</u> Terminal.	W105	163,800	1951
	W152	478,800	1964
	W84	2,137,800	Pre-1960/1996
	W101	3,255,000	1949/1996
	W105	163,800	1951/1992
	W116	3,129,000	1951/1996
	W117	516,600	1951/1996
	W118	2,079,000	1951/1996
	W123	3,011,400	1951/1996
	W124	3,171,000	1951/1996
	W128	2,310,000	1951/1996
	W134	2,142,000	1951/1996
	W152	478,800	1951/1992

3.d. Marine Loading Operations (MLOAD) regulated by this permit are the following:

MLOAD Description	MLOAD Device ID	Pollution Control Device (PCD)	PCD ID
All marine/barge loading operations conducted at the <u>Linnton</u> Terminal	L-MLOAD	None	--
All marine/barge loading operations conducted at the <u>Willbridge</u> Terminal	W-MLOAD	Vapor Recovery Unit	W-VRU

3.e. Tanker Truck/Trailer Loading Racks (TRACK) regulated by this permit are the following:

TRACK Description	TRACK Device ID	Pollution Control Device (PCD)	PCD ID
Tanker truck and trailer loading racks at the <u>Linnton</u> Terminal	L-TRACK	Vapor recovery unit (VRU) at the Linnton Terminal	L-VRU
Tanker truck and trailer loading racks at the <u>Willbridge</u> Terminal	W-TRACK	Carbon adsorption/absorption VRU at Willbridge Terminal	W-VRU

3.f. Fugitive VOC emission sources (FGTVOC) regulated by this permit are the following:

FGTVOC Description	FGTVOC Device ID
VOC emissions from Flanges, valves, pumps, etc. at the <u>Linnton</u> Terminal	L-FGTVOC
VOC emissions from Flanges, valves, pumps, etc. at the <u>Willbridge</u> Terminal	W-FGTVOC

3.g. Fuel combustion sources (BOILER) regulated by this permit are the following:

BOILER Description	BOILER Device ID
Two 16.5 x 10 ⁶ Btu/hr boilers at the <u>Linnton</u> Terminal	L-BOILER
Two boilers (55.6 x 10 ⁶ Btu/hr, 78.2 x 10 ⁶ Btu/hr) at the Willbridge Terminal	W-BOILER

need to submit a form

4. The permittee is allowed to convert or modify any FIXTANK, EXTANK, or INTANK identified in Condition 3 provided the applicable requirements are strictly adhere to. [OAR 340-218-0140]

EU ID	Description of Modification/Construction
Any FIXTANK identified in condition 3.a.	Fixed Roof Storage tank will be retrofitted with an internal floating roof.
Any EXTANK identified in condition 3.b.	External Floating Roof Storage tank will be retrofitted with a cover and be converted to an internal floating roof.
Any INTANK identified in condition 3.c	Internal Floating Roof Storage tank will be retrofitted with better roof seals or rebuilt with a domed internal floating roof.

NOTE: FIXTANK W3, W5, W7, W73, W85, W100, W102, W106, W137, W138, W139, W140, W141, and W143 have been identified by the permittee as the future project for modification.

- 4.a. The permittee shall notify the Department within 30 days of completion of modification or construction of each device.
- 4.b. The notice shall include the date of completion of modification or construction, and the date the device was or will be put into operation.
- 4.c. The notice shall also include a detail cost analysis supporting the conversion is not considered modification or reconstruction cited in 40 CFR 60.14 and 60.15. The cost analysis is not needed if the converted INTANK is subject to the NSPS requirements of 40 CFR Part 60, Subpart Kb, specified in conditions 31, 32, 33, and 34.
- 4.d. The Notice of completion form submitted pursuant to OAR 340-210-0240(3) satisfies the notification requirements of this condition, and no additional report is necessary.
5. Internal Floating Roof Tanks (INTANK_{NSPS}) that are currently or will become subject to the NSPS requirements specified in conditions 31, 32, 33, and 34 are the following:

INTANK _{NSPS} Description	INTANK _{NSPS} Device ID	Rated Capacity (gallons)	Yr. Installed/ modified
Any FIXTANK, EXTANK, INTANK that will be rebuilt/modified to INTANK per Condition 4, and become subject to the NSPS - Subpart Kb requirements.	--	--	2004 or after
A new internal floating roof tank	W201	3,570,000	2004 or after

EMISSION LIMITS AND STANDARDS

The following Table-I through Table-III contain summaries of applicable requirements other than the Plant Site Emission Limits (PSEL), along with the monitoring methods for the emissions units to which those requirements apply.

Emissions

Table-I. Facility-wide Emission Limits and Standards

Applicable Requirements		Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements	
OAR / 40 CFR	Cond No.			Method	Cond No.
340-228-0100	6	Residual fuel oil sulfur content	1.75% by weight	%Sulfur Analysis & Recordkeeping	8
340-228-0110	7	Distillate fuel oil sulfur content	0.3% by weight 0.5% by weight	%Sulfur Analysis & Recordkeeping	8
340-258-0400	9	VOC	RVP Standards	Testing and Recordkeeping	10
340-258-0110 through 340-258-0310	11	CO	Oxygenated Fuel Standards	Recordkeeping	12
340-206-0050	13	Ozone	SERP	Recordkeeping	14
340-208-0560	15	VOC	Equipment Specification	I&M Recordkeeping	16
340-208-0300	17	Odor	no nuisance	I&M Recordkeeping	18

6. **REQUIREMENT** The permittee shall not sell, distribute, use, or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight. [OAR 340-228-0100]
 7. **REQUIREMENT** The permittee shall not sell, distribute, use, or make available for use the following distillate fuel oils: [OAR 340-228-0110]
 - 7.a. ASTM Grade-1 distillate fuel oil containing more than 0.3 percent sulfur by weight; and
 - 7.b. ASTM Grade-2 distillate fuel oil containing more than 0.5 percent sulfur by weight.
 8. **MONITOR AND RECORD** The permittee shall monitor the sulfur content of each batch of residual oil and ASTM grade distillate oil sold, distributed, or used, in accordance with one of the following methods or procedures:
 - 8.a. Analyze or have analyzed by a contract laboratory a composite of representative samples taken by the permittee from each new batch of fuel oil received. Liquid fuels shall be analyzed using ASTM D129-64, D1552-83, or D4057-81 Method; or
 - 8.b. obtain a sulfur analysis certificate from the vendor for each new batch of fuel oil received; or
 - 8.c. for fuel oil received via the (Olympic) pipeline, the permittee shall retain contractual agreements providing that the sulfur contents of residual or distillate fuel oils entering the pipeline from the refinery are within the limits specified in this permit.
-
9. **REQUIREMENT** During the regulatory control period of May 1 through September 15 of any calendar year, the permittee shall comply with the applicable RVP standards of gasoline and gasohol distributed in the control area and other associated requirements of 40 CFR 80, as referenced in OAR 340-258-0400:

- Comp. calendar

10.

11. REQUIREMENT During the control period specified (November 1 through February 29), the permittee shall comply with the applicable oxygenated fuel specifications and other associated requirements established in OAR 340-258-0110 through 340-258-0310.
 12. MONITOR AND RECORD The permittee shall comply with the monitoring, recordkeeping, and reporting requirements associated with the oxygenated fuel standards of condition 11 during the control period, as specified in OAR 340-258-0110 through 340-258-0310.
-
13. REQUIREMENT In the event an Air Pollution Alert, Warning, or Emergency Episode for ozone is declared in the Portland area by the Department, the permittee shall take the action appropriate to the episode condition as described below. The permittee shall take such action when the permittee first becomes aware of such a declaration whether through news media, direct contact with the Department, or from other sources. [OAR 340-206-0050]

- VRU
is coming
this

13.c. EMERGENCY: Maintain required action of Warning condition. Cease all marine loading operations (MLOAD) of gasoline, unless control strategies are utilized to reduce VOC emissions from MLOAD by at least 95%.

14. MONITOR AND RECORD The permittee shall maintain a log summarizing actions taken during an applicable air pollution episode, pursuant to condition 13, if any.

15. REQUIREMENT Gasoline storage tanks with a capacity of 500 gallons or more, installed after January 1, 1970, shall be equipped with submersible filling device or other vapor emission control systems. [OAR 340-208-0560(3)] [State-only enforceable]

16. MONITOR AND RECORD For the purpose of determining compliance with the equipment specifications of condition 15, the permittee shall have the means to show or keep readily accessible records (e.g., equipment spec. or engineering drawings) showing the applicable storage vessels are built to the specifications.

17. REQUIREMENT The permittee shall not allow the emission of odorous matter so as to create nuisance conditions off the permittee's property. [OAR 340-208-0300] [State-only enforceable]

18. MONITOR AND RECORD The permittee shall record all written complaints or complaints received via telephone or in person by the responsible official or a designated appointee that specifically refer to a complaint of odor from the permitted facility. The log shall also record permittee's actions to investigate, make a determination as to the validity of the complaint, and resolve the problem within two working days or within such longer time (not to exceed 7 days) as is reasonably necessary to resolve the problem that led to the complaint. If more than seven (7) days are needed to resolve the problem, the permittee shall notify the Department within the specified 7 day period.

complaint log book is going off

Table-II. Emissions Unit Specific Emission Limits and Standards

EU/PCD ID	Applicable Requirements		Pollutant/ Parameter	Limits/ Standards	Monitoring Requirements	
	OAR / 40 CFR	Cond No.			Method	Cond No.
BOILER	340-208-0110(2)	19	visible emissions	20% opacity	VE periodic monitoring	21
	340-228-0210(1)(a)	20	PM/PM ₁₀	0.2 gr/dscf	VE/ST periodic monitoring	21
	340-228-0100 & 0110	22	Residual oil sulfur content	1.75% by weight	%Sulfur Analysis & Recordkeeping	23
			Distillate oil sulfur content	0.3% by weight 0.5% by weight	%Sulfur Analysis & Recordkeeping	
L-TRACK/VRU W-TRACK/VRU	340-232-0090(1)	24	VOC	80 mg/l, O&M, Equipment spec.	Testing, I&M Recordkeeping	26
W-TRACK/VRU	40 CFR, Part 60,	25	VOC	35 mg/l, O&M,	Testing, I&M Recordkeeping	26

EU/PCD ID	Applicable Requirements		Pollutant/ Parameter	Limits/ Standards	Monitoring Requirements	
	OAR / 40 CFR	Cond No.			Method	Cond No.
	subpart XX			Equipment spec.		
EXTANK	340-232-0150	27	VOC	Equipment spec.	Measurements, I&M Recordkeeping	28
INTANK	340-232-0150	29	VOC	Equipment spec.	Measurements, I&M Recordkeeping	30
INTANK _{NSPS}	40 CFR Part 60, Kb	31	VOC	Equipment spec.	Measurements, I&M Recordkeeping	32 to 34
FIXTANK	340-232-0150(1)	35	VOC	O&M req.	Recordkeeping	36
MLOAD	340-232-0110	37	VOC	Curtailement	Recordkeeping	38

19. REQUIREMENT FOR BOILER The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from emissions unit BOILER. Opacity shall be measured in accordance with condition 21. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]

20. REQUIREMENT FOR BOILER The permittee shall not cause or allow the emissions of particulate matter in excess of 0.2 grain per standard cubic foot, corrected to 12% CO₂ or 50% excess air, from all fuel burning equipment grouped under emissions unit BOILER. Particulate matter emissions shall be measured in accordance with condition 55. [OAR 340-340-228-0210(1)(a)]

21. MONITOR AND RECORD Except as provided in condition 21.f, the permittee shall conduct visible emissions survey at each of the fuel burning equipment grouped under emissions units BOILER, in accordance with the following procedures and frequencies:

- 21.a. Within 24 hours of start-up of BOILER on fuel oil, then at a minimum of once per day thereafter, the permittee shall conduct a six (6) minute visible emission survey at each monitoring point using the procedures outlined in EPA Method 22. The minimum monitoring frequency specified is also the required interval between two consecutive monitoring periods.
- 21.b. All visible emissions observations shall be conducted during period when the equipment is operating.
- 21.c. If visible emissions, from an individual monitoring point, are detected for more than 5% (18 seconds) of the survey time, an EPA Method 9 test shall be conducted on that monitoring point for a six (6) minute period in accordance with the Department's Source Sampling Manual. If any of the observations during the specified 6-minute period exceed the applicable 20% opacity limit, the observation period shall continue until 60 minute of observations have been completed or until an exceedance of the opacity standard in condition 19 has been documented.
- 21.d. If the observer is unable to conduct the survey and/or EPA Method 9 tests due to visual interference caused by other visible emissions sources (e.g. fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on the data observation sheet and make at least three attempts in same day to

conduct the surveys and/or tests at approximately 2 hours intervals throughout the day. If no observations are made for that day, the observer shall continue to attempt to conduct the survey and/or EPA Method 9 daily until a valid observation is made.

- 21.e. If visible emissions surveys conducted during 10 consecutive observations show no visible emissions for a particular source, the permittee may reduce the minimum monitoring frequency to once per week for that source. Anytime the weekly visible emissions survey show any visible emissions, or when requested by the Department inspector, the observations for that source shall start over with daily surveys, as noted in item 21.a of this condition.
 - 21.f. As long as any of the equipment grouped under the emissions unit BOILER is fueled by natural gas or LPG, the visual emissions survey required by this condition is waived for that equipment. For the purpose of verification, the permittee shall monitor and record the type(s) of fuel used in the BOILER, as specified in (PSEL) monitoring condition 51.
-

22. REQUIREMENT FOR BOILER The permittee shall not combust any of the following fuel oils in the BOILER: [OAR 340-228-0100 & 0110]

- 22.a. Residual fuel oil containing more than 1.75 percent sulfur by weight;
- 22.b. ASTM Grade-1 distillate fuel oil containing more than 0.3 percent sulfur by weight; and
- 22.c. ASTM Grade-2 distillate fuel oil containing more than 0.5 percent sulfur by weight.

23. MONITOR AND RECORD The permittee shall monitor the sulfur content of each batch of residual or distillate fuel oil used in BOILER using the same methods outlined in Condition 8:

- 23.a. Analyze or have analyzed by a contract laboratory a composite of representative samples taken by the permittee from each new batch of fuel oil received. Liquid fuels shall be analyzed using ASTM D129-64, D1552-83, or D4057-81 Method; or
 - 23.b. obtain a sulfur analysis certificate from the vendor for each new batch of fuel oil received; or
 - 23.c. for fuel oil received via the (Olympic) pipeline, the permittee shall retain contractual agreements providing that the sulfur contents of residual or distillate fuel oils entering the pipeline from the refinery are within the limits specified in this permit.
-

24. REQUIREMENT FOR L-TRACK/VRU: The permittee shall meet the following emissions standards and provisions applicable to all the loading racks existing at the permitted facility that transfer gasoline products into the delivery tanks and trailers: [OAR 340-232-0090 and 340-232-0100]

- 24.a. The loading racks shall be equipped with the vapor collection and control system designed to meet the following criteria:

- 24.a.i. The total volatile organic compound (VOC) emissions from the loading operations shall not exceed 80 milligrams of VOC per liter of gasoline loaded (668 lb. VOC/10⁶ gal gasoline loaded);
- 24.a.ii. all organic vapors displaced from the gasoline delivery tanks and trailers during product loading are collected and vented to the vapor control system only;
- 24.a.iii. each vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack; and
- 24.a.iv. all vapor lines have fittings which make vapor-tight connections and which close automatically and immediately when disconnected.
- 24.b. Loading gasoline products into the delivery tanks and trailers shall be limited to the certified vapor-tight tanks and trailers, as verified from one of the following:
 - 24.b.i. A current Oregon leak test certification form for the delivery vessel is on file at the terminal; or
 - 24.b.ii. a valid Oregon delivery vessel certification sticker, as specified in OAR 340-232-100(1)(c), is clearly displayed on the delivery vessel.
- 24.c. The permittee shall ensure that the following operation and maintenance (O&M) requirements associated with the gasoline loading operations are met:
 - 24.c.i. The vapor collection and liquid loading equipment shall be operated in a manner to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (Pa [18 inches of H₂O]) and vacuum from exceeding 1,500 Pa (6 in H₂O) during product loading;
 - 24.c.ii. no gasoline shall be loaded into the delivery vessel unless the vessel is equipped to be compatible with the terminal's vapor collection system, and vapor return hose is properly connected;
 - 24.c.iii. allow no more than 10 cubic centimeters (cm³) drainage per disconnect on the basis of 5 consecutive disconnects;
 - 24.c.iv. ensure no visible liquid gasoline leaks during the loading operations; and
 - 24.c.v. if more than five (5) gallons are spilled, the permittee shall report the spillage in accordance with condition 64, the excess emissions reporting requirements.
- 25. REQUIREMENT FOR W-TRACK/VRU In addition to meeting all the provisions set forth in Condition 24, except for and in lieu of item 24.a.i, the total volatile organic compound (VOC) emissions from the Willbridge loading racks (W-TRACK/VRU) shall not exceed 35 milligrams of VOC per liter (292 lb VOC/10⁶ gal) of gasoline loaded. [40 CFR 60.502(b)]
- 26. MONITOR AND RECORD For the VOC emissions standards applicable to L-TRACK/VRU and W-TRACK/VRU, as specified in condition 24, the permittee shall conduct the required inspection and testing in accordance with the following procedures and frequency:
 - 26.a. The permittee shall determine compliance with the mass emission limitation of Condition 24.a.i (80 mg/L for L-TRACK/VRU) and Condition 25 (35 mg/L for W-TRACK/VRU) by testing, at minimum of once during the permit term, within one year from the date of the permit issuance, or within three years from the date of the most recent source test, in accordance with Method 33 on file with the Department; the methods and procedures delineated in 40 CFR 60.503, subpart XX,

VRU
@ Linton
out of service
VRU @ W
source test
was done 7/27/04

as summarized in Attachment 1 of this permit; or an alternative method approved in writing by the Department.

- 26.b. The permittee shall have the means (e.g. physical inspection) to show or keep readily accessible records showing the TRACK meets the design specifications of conditions 24.a.ii through 24.a.iv of this permit.
- 26.c. At a minimum of once during the permit term, which shall coincide with the testing conducted per condition 26.a, the permittee shall determine compliance with condition 24.c.i by testing in accordance with the following methods and procedures:
- 26.c.i. Using a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument) capable of measuring up to 500 millimeters (mm [20 inches]) of water gauge pressure with the ± 2.5 mm H₂O precision;
 - 26.c.ii. measure and record the gauge pressure in the gasoline tank being loaded by connecting the pressure measurement device to a pressure tap in the terminal's vapor collection system, located as close as possible to the connection with the gasoline tank truck.
 - 26.c.iii. Record the pressure at 5 minute interval while a gasoline tank truck is being loaded, and record the highest instantaneous pressure that occurs during loading.
 - 26.c.iv. Every loading position shall be tested at least once during the performance test.
- 26.d. At a minimum of once per month, the permittee shall inspect the vapor collection system, the vapor control system, and each loading rack for liquid and vapor leaks during product transfer operations. For purpose of this inspection, detection methods incorporating sight, sound, or smell are acceptable. Each detection of leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. The permittee shall maintain the records of this inspection, and include, at minimum, the following information:
- 26.d.i. date of inspection;
 - 26.d.ii. findings - location, nature, and severity of each leak, or indicate no leaks;
 - 26.d.iii. leak determination method; and
 - 26.d.iv. corrective action taken - record date each leak repaired and provide reason for any repair interval in excess of 15 days, as applicable.
- 26.e. The permittee shall maintain records of current leak test certifications for all the delivery vessels loading gasoline at the permitted facility, as required per condition 24.b, and the file shall include at minimum the following information on each delivery vessel:
- 26.e.i. tank owner and address;
 - 26.e.ii. tank identification number;
 - 26.e.iii. tester name, signature, and affiliation;
 - 26.e.iv. test Method used;
 - 26.e.v. testing location and date of test;
 - 26.e.vi. test results: actual pressure change (mm H₂O) in 5 minutes, average of two runs; and
 - 26.e.vii. update the documentation file, as often as possible, but at least once per year to reflect the delivery vessel status.
- 26.f. The permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the terminal.

*daily VRY
inspections are
done*

- 26.g. The permittee shall cross-check each tank identification number obtained in item 26.f with the permittee's file as maintained per item 26.e within 2 weeks after the corresponding tank is loaded. If any discrepancy is noted, the permittee shall take corrective steps necessary:
- 26.g.i. Notify the owner or operator of each non-vapor tight gasoline tank truck, within 3 weeks after the loading has occurred; and
 - 26.g.ii. take steps assuring the non-vapor tight gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that tank is obtained from the cargo tank owner.
- 26.h. The permittee may use the alternative procedures to those specified in conditions 26.e through 26.g, upon written application to, and approved in writing by the Department.

*2 external floating roof
2 L.M.*

27. **REQUIREMENT FOR EXTANK** Except as provided in condition 27.g, the external floating roof storage tanks (EXTANK) shall be equipped with the closure device consisting of two seals, one above the other, and meet the following equipment standards and provisions: [OAR 340-232-0150]

- 27.a. The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal; and must comply with the following specifications:
- 27.a.i. The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 square centimeters per meter (cm^2/m [1 in^2/ft]) of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (0.5 in).
 - 27.a.ii. The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 square centimeters per meter (cm^2/m [10 in^2/ft]) of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm (1.5 in).
 - 27.a.iii. If metallic shoe seal is used, one end of metallic shoe must extend into the stored liquid and the other end must extend to a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.
- 27.b. The secondary seal must be installed above the primary seal such that it completely covers the space between the roof edge and the tank wall, in accordance with the following specifications:
- 27.b.i. The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm^2 per meter (1 in^2/ft) of tank diameter; and
 - 27.b.ii. the width of any portion of any gap between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 1.27 cm (0.5 in). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.
 - 27.b.iii. The permittee is exempted from the requirements for secondary seal gap criteria established in this condition when performing gap measurements or inspections of the primary seal, as conducted per condition 28.c of this permit.
- 27.c. All openings in the external floating roof, except automatic bleeder vents, rim space vents, and leg sleeves shall be equipped with:

- 27.c.i. Covers, seals, or lids that remain closed except for when the openings are in actual use; and
- 27.c.ii. projections that remain below the liquid surface at all times when projections into the tank are necessary.
- 27.d. Automatic bleeder vents must be closed at all times except when the roof is being floated off or being landed on the roof leg supports.
- 27.e. Rim vents are set to open only when the roof is being floated off the leg supports, or at the manufacturer's recommended setting.
- 27.f. Emergency roof drains must be provided with slotted membrane fabric covers, or equivalent, which cover over at least 90 percent of the area of the drain opening.
- 27.g. Any storage tank grouped under EXTANK storing VOL with a true vapor pressure of less than 1.5 psia at the storage temperature is exempted from the requirements of this condition and the associated monitoring specified in condition 28.

28. **MONITOR AND RECORD** For the equipment specifications applicable to EXTANK, as outlined in condition 27, the permittee shall conduct the required inspection and testing in accordance with the following procedures and frequency:

- 28.a. At minimum of once during each semi-annual reporting period, the permittee shall conduct visual and other inspections necessary to ensure all the tank parts are functioning properly, as outlined in conditions 27.c through 27.f.
- 28.b. At minimum of once during each annual reporting period, the permittee shall determine compliance with the secondary seal specifications outlined in condition 27.b of this permit by:
- 28.b.i. physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; then
- 28.b.i.(1) continue as necessary with probes of various width to accurately measure the actual distances from the tank wall to the seal and multiply such width by its respective circumferential distance; and
- 28.b.i.(2) add the gap surface area of each gap location, divide the sum by its nominal diameter of the tank, and compare the result to the standard in condition 27.b.i.
- 28.b.ii. make records of all places where the width of any gap between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal that exceeded 1.27 cm (1/2 in); and
- 28.b.iii. make records of all places where a 0.32 cm (1/8 in) uniform diameter probe (or smaller) passes freely through the width of any gap between the tank wall and the secondary seal used in combination with vapor-mounted primary seal.

*Visual Inspections
are to be done
every 6 months
one done every month*

*Compliance
Calendar*

*Comp.
Cal.*

- 28.c. At minimum of once during the permit term, by no later than 5 years from the date of the previous inspection, or as required per condition 28.d, which ever is sooner, the permittee shall determine compliance with the primary seal specifications outlined in condition 27.a of this permit using the same measuring methods specified in item 28.b of this condition, except as noted below:
- 28.c.i. In lieu of monitoring specified in item 28.b.ii, make records of all places where the width of any gap between the tank wall and metallic shoe or liquid-mounted primary seal that exceeded 3.81 cm (1.5 in); and
 - 28.c.ii. in lieu of monitoring specified in item 28.b.iii, make records of all places where the width of any gap between the tank wall and the vapor-mounted primary seal that exceeded 1.27 cm (0.5 in); and
 - 28.c.iii. all primary seal inspections or gap measurements which require removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.
- 28.d. If storage tank ceases to store volatile organic liquids (VOL) for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill; and the measurements of gaps between the tank wall and the primary seal and the secondary seal shall be performed within 60 days of the initial fill with VOL.
- 28.e. The permittee shall notify the Department Northwest Region in writing at least 7 days prior to conducting required primary or secondary seal compliance inspection in condition 28, and provide the Department inspector an opportunity to observe.
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29. REQUIREMENT FOR INTANK Except as provided condition 29.g, the internal floating roof storage tanks (INTANK) shall be equipped with a fixed roof with an internal floating type cover, and meet the following equipment standards and provisions: [OAR 340-232-0150]
- 29.a. The internal floating cover shall be equipped with a continuous closure device (primary seal) between the tank wall and the cover edge.
 - 29.b. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. During the period the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
 - 29.c. Each opening in the cover except for automatic bleeder vents and the rim space vents is to be provided a projection below the liquid surface.
 - 29.d. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use.
 - 29.e. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

- 29.f. Rim vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- 29.g. Any storage tank grouped under INTANK storing VOL with a true vapor pressure of less than 1.5 psia at the storage temperature is exempted from the requirements of this condition and the associated monitoring specified in condition 30.

30. MONITOR AND RECORD For the equipment specifications applicable to INTANK, as outlined in condition 29, the permittee shall conduct the visual inspection in accordance with the following procedures and frequency:

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- 30.a. At a minimum of once every 12 months, the permittee shall conduct visual and other inspections necessary to ensure all the tank parts are functioning properly, as outlined in condition 29.b through 29.f.
- 30.b. Each time the vessel is emptied and degassed, prior to filling the storage vessel with VOL, visually inspect the primary seal, and/or the secondary seal if one is in service, of the internal floating roof. If there are holes, tears, or other openings and/or defects in the seal or the seal fabric of the internal floating roof, the permittee shall repair the items before filling the storage vessel.
- 30.c. The permittee shall record in a log the date of the inspection, the result of the inspection, and the corrective actions taken, if any.

31. REQUIREMENT FOR INTANK_{NSPS} The INTANK_{NSPS} identified in condition 5 shall comply with the requirements of 40 CFR, Subpart Kb - "Standards of Performance for Volatile Organic Liquid Storage Vessels", except as relieved by condition 31.j: [40 CFR 60.112b(a)(1)]

- 31.a. Internal floating roof shall be equipped with one of the following closure devices between the wall of the vessel and the edge of the internal floating roof:
 - 31.a.i. A foam-filled or liquid-filled seal mounted in contact with the liquid (i.e. liquid-mounted seal);
 - 31.a.ii. a mechanical shoe seal; or
 - 31.a.iii. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
- 31.b. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. During the period the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- 31.c. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to be provided a projection below the liquid surface.
- 31.d. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a

cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers and each access hatch and automatic gauge float well shall be bolted except when they are in use.

- 31.e. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
 - 31.f. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
 - 31.g. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
 - 31.h. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
 - 31.i. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
 - 31.j. Exemption: Any INTANK_{NSPS} (see condition 5) with a storage capacity greater than or equal to 151 m³ (39,890 gallons) that stores VOL with a true vapor pressure of less than 3.5 kPa (0.5 psi) at the storage temperature; or any INTANK_{NSPS} with a storage capacity greater than 75 m³ (19,813 gallons) but less than 151 m³ (39,890 gallons) that stores VOL with a true vapor pressure of less than 15 kPa (2.2 psi) at the storage temperature; or any INTANK_{NSPS} with a storage capacity less than 75 m³ (19,813 gallons) is exempt from the requirements of this condition and the associated monitoring, recordkeeping, and reporting requirements specified in conditions 32 through 34 excluding condition 33.a. [40 CFR 60.112b (b) & (c)]
 - 31.k. For the exempt INTANK_{NSPS} identified in condition 31.j above, the permittee shall monitor and maintain records of the following product information: [40 CFR, 60.116b (c)]
 - 31.k.i. type of products stored in each tank; and
 - 31.k.ii. the maximum vapor pressure of that products stored during the respective storage period.
 - 31.l. Notify: For the exempt INTANK_{NSPS} identified in condition 31.j above, when the maximum true vapor pressure of VOL stored in the INTANK_{NSPS} (see condition 5) with a storage capacity greater than or equal to 151 m³ (39,890 gallons) exceeds 5.2 kPa (0.75 psi); or when the maximum true vapor pressure of VOL stored in INTANK_{NSPS} with a storage capacity greater than 75 m³ (19,813 gallons) but less than 151 m³ (39,890 gallons) exceeds 27.6 kPa (4.0 psi), the permittee shall notify the Department within 30 days. [40 CFR, 60.116b (d)]
32. NSPS, Subpart Kb Monitoring: For INTANK_{NSPS} identified in condition 5, the permittee shall conduct the required inspection and testing in accordance with the following procedures and frequency:
- 32.a. Prior to filling the storage vessel with VOL, visually inspect the primary seal and the secondary seal (if one is in service) of the internal floating roof. If there are holes, tears, or other openings

and/or defects in the seal or the seal fabric of the internal floating roof, the permittee shall repair the items before filling the storage vessel.

- 32.b. For vessels equipped with a liquid-mounted primary seal per condition 31.a.i or a mechanical shoe primary seal per condition 31.a.ii, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill:
 - 32.b.i. If the internal floating roof is not resting on the VOL surface, or there is VOL accumulated on the roof, or the seal is detached, or there are holes, tears, or other openings in the seal fabric, the permittee shall repair the defects or empty and remove the storage vessel from service within 45 days of identification of defects.
 - 32.b.ii. If the defects cannot be repaired or the vessel cannot be emptied within 45 days, the permittee may request for a 30-day extension in the written report required per condition 34.b. Such extension request shall include, but not limited to, a demonstration of unavailability of alternate storage capacity and a specification or a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- 32.c. For vessels equipped with a double-seal system as specified in condition 31.a.iii, the permittee shall visually inspect the vessel in accordance with one of the following methods/procedures:
 - 32.c.i. On an annual basis, conduct the visual inspection as specified in condition 32.b; and
 - 32.c.ii. at least once every 10 years, visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, and slotted membranes and sleeve seals (if any). If the internal floating roof has defects; primary or secondary (if one is in service) seal has holes, tears, or other openings in the seal or seal fabric; the gaskets no longer close off the liquid surfaces from the atmosphere; and/or the slotted membrane has more than 10 percent open area, the permittee shall repair all the noted defects before refilling the storage vessel with VOL.
- 32.d. **Notify:** The permittee shall notify the Department Northwest Region in writing at least 30 days prior to filling or refilling of each storage vessel for which an inspection is conducted per condition 32.a or 32.c.ii, and provide the Department inspector an opportunity to observe. If the inspection conducted per condition 32.c.ii cannot be planned 30 days in advance, the permittee shall notify the Department, at least 7 days prior to refilling the vessel, via telephone immediately followed by a written notification via express mail so that the notification is received by the Department at least 7 days prior to the refilling.
- 33. **NSPS. Subpart Kb, Recordkeeping:** For INTANK_{NSPS} identified in condition 5, the permittee shall adhere to the following recordkeeping requirements:
 - 33.a. The permittee shall keep records showing the dimension of the storage vessel and an analysis showing the capacity of each INTANK_{NSPS}. These records shall be kept for the life of the source. [40 CFR, 60.116b(a)/(b)]
 - 33.b. The permittee shall keep the following record of each inspection performed per condition 32: [40 CFR 60.115b(a)(2)]

- 33.b.i. storage vessel ID
 - 33.b.ii. date of the inspection
 - 33.b.iii. the observed condition of each component of the equipment inspected (e.g., seals, internal floating roof, and fittings)
 - 33.c. The permittee shall maintain records of dates the storage vessels were emptied and refilled; and monitor and record the following product information:
 - 33.c.i. type of products stored in each tank; and
 - 33.c.ii. the maximum true vapor pressure of that product during the respective storage period.
 - 34. **NSPS, Subpart Kb, Reporting:** For INTANK_{NSPS} identified in condition 5, once the unit is modified and become subject to meeting the equipment specifications outlined in condition 31, the permittee shall adhere to the following reporting requirements:
 - 34.a. After installing an internal floating roof, submit a written report certifying that the storage tank meets the specifications outlined in conditions 31 and 32.a. [40 CFR 60.115b(a)(1)]
 - 34.b. If any defects are detected during the inspection conducted per condition 32.b or 32.c, the permittee shall provide a written report to the Department within 30 days of the inspection, identifying the storage vessel, the nature of the defects and the date the storage vessel was emptied or the nature of and date the repair was made. [40 CFR 60.115b (3)/(4)]
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- 35. **REQUIREMENT FOR FIXTANK** All fixed roof storage tanks grouped under FIXTANK having a storage capacity greater than 39,000 gallons shall not store gasoline or other VOL with a true vapor pressure, as stored, greater than 1.52 psia at actual monthly average storage temperature. [OAR 340-232-0150(1)]
 - 36. **MONITOR AND RECORD** For the purpose of demonstrating compliance with Condition 35, the permittee shall keep records of all products stored in the fixed roof storage tank with a capacity greater than 39,000 gallons. [Note that the PSEL monitoring protocols for FIXTANK already satisfies the recordkeeping requirements of this condition.]
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- 37. **REQUIREMENT FOR MLOAD** The permittee shall meet the following emissions standards and provisions applicable to all marine loading operations (MLOAD) that transfer gasoline products into the marine tank vessels: [OAR 340-232-0110]
 - 37.a. Each loading berth at the marine terminal and all marine tank vessels used to transfer gasoline shall be equipped with the vapor collection system capable of collecting all displaced gasoline vapors during the marine loading operations.
 - 37.b. The VOC vapors that are displaced and collected during the marine loading operations must be reduced to at least 95 percent by weight, or limited to 5.7 grams per cubic meter (2 lbs. per 1000 bbls) of liquid loaded, as determined by EPA Method 25 or other methods approved in writing by the Department.

- 37.c. The permittee shall ensure that the following operation and maintenance (O&M) requirements associated with the gasoline loading operations are met:
- 37.c.i. All hatches, pressure relief valves, connections, gauging ports and vents associated with the loading operations must be leak free and vapor tight.
 - 37.c.ii. Loading must cease anytime gas or liquid leaks are detected, and loading may resume only after leaks are repaired. If the repair of leaking components is technically infeasible without dry-docking the vessel or cannot otherwise be undertaken safely, submit documentation to the Department detailing the situation. Subsequent loading events involving the leaking components are prohibited until the leak is repaired.
 - 37.c.iii. Any liquid or gaseous leak detected by Department staff at any time is a violation of this condition.
- 37.d. Exemption: The following marine loading activities are exempt from the VOC control requirements of this condition, except as noted in condition 37.d.iv:
- 37.d.i. Marine vessel bunkering;
 - 37.d.ii. Loading any products other than gasoline into the vessel that has been gas freed, regardless of the prior cargo; or
 - 37.d.iii. Lightering when neither vessel is berthed at a marine terminal dock, except during CAA day as described in condition 37.d.iv below;
 - 37.d.iv. Lightering exempted from the control requirements by condition 37.d.iii above must be curtailed from 2:00 a.m. until 2:00 p.m. when the Department declares a Clean Air Action (CAA) day. If the Department declares a second CAA day before 2:00 p.m. of the first curtailment period, then such uncontrolled lightering must be curtailed for an additional 24 hours until 2:00 p.m. on the second day. If a third CAA day in a row is declared, then uncontrolled lightering is permissible for a 12-hour period starting at 2 p.m. on the second CAA day and ending at 2 a.m. on the third CAA day. Uncontrolled lightering must be curtailed from 2 a.m. until 2 p.m. on the third CAA day. If the Department continues to declare CAA days consecutively after the third day, the curtailment and loading pattern used for the third CAA day will apply.
38. MONITOR AND RECORD For the VOC emission standard and O&M requirements applicable to MLOAD, as specified in condition 37, the permittee shall conduct the required inspection and testing in accordance with the following procedures and frequency:
- 38.a. The permittee shall determine compliance with the mass emission limitation (5.7 mg/L) or the 95% VOC reduction limit of condition 37.b by testing, at minimum of once per year, initial test within one year from the date of the permit issuance or within one year from the date of the most recent source test, in accordance with EPA Method 25 or other methods approved in writing by the Department.
 - 38.b. Any marine tank vessel used to transfer gasoline must be certified on an annual basis that the vessel is leak free, vapor tight, and in good working order, using EPA Method 21 or other methods approved in writing by the Department. The permittee shall maintain records of all the marine vessels that loaded gasoline at the permitted facility, and the record-file shall include at minimum the following information on each marine vessel:
 - 38.b.i. Marine vessel owner and address;
 - 38.b.ii. vessel identification number;

- 38.b.iii. leak test Method used;
 - 38.b.iv. testing location and date of test;
 - 38.b.v. tester name, signature, and affiliation;
 - 38.b.vi. a summary of test results; and
 - 38.b.vii. update the file, as often as possible, but at least once per year to reflect the marine vessel certification-status.
- 38.c. The permittee must maintain the operating records of each loading event. Monitor and record at minimum the following information:
- 38.c.i. The location of each loading event.
 - 38.c.ii. The date of arrival and departure of the vessel.
 - 38.c.iii. The name, registry and legal owner of each marine tank vessel participating in the loading event.
 - 38.c.iv. The type and amount of fuel product loaded into the marine tank vessel.
 - 38.c.v. The prior cargo carried by the marine tank vessel. If the marine tank vessel has been gas freed, then the prior cargo can be recorded as gas freed.
 - 38.c.vi. The description of any gaseous or liquid leak, date and time of leak detection, leak repair action taken and screening level after completion of the leak repair.

Table-III. Emission Limits and Standards applicable to Insignificant Activities

Applicable Requirements		Pollutant/ Parameter	Limits/ Standards
OAR / 40 CFR	Cond No.		
340-208-0600	39	opacity	20 %
340-208-0110(2) & (3)(a)	40	opacity	20 %
340-228-0210(1)(b)	41	PM/PM ₁₀	0.1 gr/dscf
340-226-0210(1)(b)	42	PM/PM ₁₀	0.1 gr/dscf
340-208-0210	43	Fugitive/dust	no nuisance
340-232-0180	44	VOC	Equipment Specification
340-242-0730	45	VOC	Coating Specification
340-208-0620	46	PM	< 250 micron

39. **REQUIREMENT** The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than thirty (30) seconds in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from any non-fuel burning insignificant source. Opacity shall be measured in accordance with condition 55. [OAR 340-208-0600] [State-only enforceable]
40. **REQUIREMENT** The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than three (3) minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from any fuel burning insignificant

source. Opacity shall be measured in accordance with condition 55. [OAR 340-208-0110(2) and 340-208-0110 (3)(a)]

41. **REQUIREMENT** The permittee shall not cause or allow the emissions of particulate matter in excess of 0.1 grain per standard cubic foot, corrected to 12% CO₂ or 50% excess air, from any fuel-burning insignificant source. Particulate matter emissions shall be measured in accordance with condition 55. [OAR 340-228-0210(1)(b)]
42. **REQUIREMENT** The permittee shall not cause or allow the emissions of particulate matter in excess of 0.1 grain per standard cubic foot, from any non-fuel-burning insignificant source. Particulate matter emissions shall be measured in accordance with condition 55. [OAR 340-226-0210(1)(b)]
43. **REQUIREMENT** The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne in accordance with OAR 340-208-0210.
44. **REQUIREMENT** The permittee shall operate the parts/tools cleaning equipment and dip tanks at the permitted facility in accordance with the following specifications. Non-VOC solvents as defined in OAR 340-232-0010 are exempt from the requirements of this condition: [OAR 340-232-0180].
- 44.a. Each sink must be equipped with a cover that is readily opened and closed; and
- 44.b. a cover must be closed during idle periods if the sink contains any free standing solvents.
45. **REQUIREMENT** The permittee shall not knowingly use or contract for the use of any noncomplying spray paint or architectural coating manufactured after July 1, 1996. In addition, all VOC-containing architectural coatings shall be stored in closed containers when not being accessed, filled, emptied, maintained, repaired or otherwise used. [OAR 340-242-730]
46. **REQUIREMENT** Particulate matter which is larger than 250 microns and which may be deposited upon the real property of another person shall not be emitted. [OAR 340-208-0620] [State-only enforceable]
47. **MONITOR, RECORD, & REPORT** No monitoring, recordkeeping, or reporting is required for requirements applicable to insignificant activities listed from conditions 39 through 47.
48. **TEST** No testing is required for requirements applicable to insignificant activities. However, if testing is conducted for the purpose of demonstrating compliance, or verifying emission factors, the permittee shall use the test methods referenced in condition 55.

PLANT SITE EMISSION LIMITS

49. **ANNUAL PSEL REQUIREMENT** The annual plant site emissions based on 12-month rolling average shall not exceed the amount (tons/year) specified in this condition: [OAR 340-222-0020 and 340-222-0040/41]:

EU ID	PM ₁₀	SO ₂	NO _x	CO	VOC
Plant-wide Total:	14	104	44	99	236

The annual plant site emissions limits apply to any 12-consecutive calendar month period; meaning the annual emissions for the previous 12-month period must be calculated at the end of each calendar month, for a total of 12 times during the calendar year.

50. Unassigned Emissions [OAR 340-222-0045]

50.a. The following Unassigned Emissions (tons/yr) are effective until July 1, 2007:

Pollutant:	PM ₁₀	SO ₂	NO _x
Unassigned:	15	316	40

50.b. After July 1, 2007, the following Unassigned Emissions (tons/yr) become effective:

Pollutant:	PM ₁₀	SO ₂	NO _x
Unassigned:	15	40	40

51. MONITOR AND RECORD FOR PSEL: The permittee shall determine compliance with the annual PSEL specified in condition 49 by conducting monitoring in accordance with the procedures and frequencies specified in conditions 51 through 53. The permittee shall monitor and record the following material and process parameters on a monthly basis:

EMISSIONS UNIT	OPERATING PARAMETER	UNIT	METHOD
BOILER	Residual fuel oil burned	10 ³ gallon	Recordkeeping
	Distillate fuel oil burned	10 ³ gallon	
	Natural gas burned	10 ⁶ ft ³ NG	
MLOAD	Throughput of each organic liquid product	Gallons	Recordkeeping
TRACK	Throughput of each organic liquid product	Gallons	Recordkeeping
FIXTANK	Throughput of each organic liquid product from each storage tank.	Gallons	Recordkeeping
EXTANK	Throughput of each organic liquid product from each storage tank.	Gallons	Recordkeeping
INTANK	Throughput of each organic liquid product from each storage tank.	Gallons	Recordkeeping

52. BOILER: At the end of each month, calculate the annual emissions (i.e., emissions during the previous 12-month period) of each regulated criteria pollutant from BOILER by using the operating parameters (e.g., fuel usage) obtained in condition 51 and applying to the formula and the emissions factors provided below:

$$E_j = \sum_{\text{previous 12-mo}} (P_i \cdot EF_{i,j}) / 2,000 = [(P_1 \cdot EF_{1,j}) + (P_2 \cdot EF_{2,j})] / 2,000$$

where: E_j = pollutant "j" emissions; tons/year.

P_i = operating parameter identified in condition 51; residual, distillate, or natural gas.

$EF_{i,j}$ = emission factor identified for each fuel type "i" and pollutant "j" listed below:

	FUEL	PM ₁₀	SO ₂ ⁽¹⁾	NO _x	CO	VOC	UNIT
EF _{Residual,j}	Residual oil	9.19(%S)+3.22	157(%S)	55	5	2.8 x 10 ⁻¹	lbs/10 ³ gal
EF _{Distillate,j}	Distillate oil	2	142(%S)	20	5	2 x 10 ⁻¹	lbs/10 ³ gal
EF _{ng,j}	Natural gas	2.5	1.7	100	84	5.5	lbs/10 ⁶ ft ³

⁽¹⁾ SO₂ EF for res. or dist. oil are function of %S, obtained per monitoring condition 8 or 23.

53. VOC EUs: At the end of each month, calculate the annual VOC emissions from emissions units FIXTANK, EXTANK, INTANK, MLOAD, TRACK, and FGTVOC using the operating parameters for EU identified in 51 and applying to the AP42 algorithms provided below:

$$E_{VOC} = \sum_{\text{previous 12-mo}} E_i$$

where: E_{VOC} = Plant-wide (excluding BOILER) annual VOC emissions; and
E_i = Annual VOC emissions from emissions unit EU_i specified.

- 53.a. Except as provided in condition 53.g, VOC emissions from each fixed roof storage tank grouped under the emissions unit FIXTANK shall be calculated based on the following AP42 algorithms:

$$(1) \quad L_{\text{FIXTANK}} = \text{Total loss} = L_B + L_W \quad (\text{lbs/yr})$$

$$L_B = \text{fixed roof breathing loss} = 2.26 \times 10^2 M_V [P/(P_A - P)]^{0.68} D^{1.73} H^{0.51} \Delta T^{0.5} F_P C K_C$$

$$L_W = \text{fixed roof working loss} = 2.4 \times 10^5 M_V P V N K_N K_C$$

where:

M_V = average vapor molecular weight

P = true vapor pressure at bulk liquid conditions, psia; see TABLE-2, Attachment 2

P_A = average atmospheric pressure at tank location, psia; default = 14.7 psi

D = tank diameter, feet

H = average vapor space height - if not available, assume H equals 1/2 the tank height.

ΔT = average ambient diurnal temperature change, °F; default = 15°F (assumption)

F_P = paint factor; see TABLE-1, Attachment 2

C = adjustment factor for small tanks with D < 30 feet

= 0.0771 (D) - 0.0013 (D²) - 0.1334; otherwise C = 1 for D ≥ 30.

K_C = product factor; for crude oil, K_C = 0.65. For all other organic liquids, K_C = 1.0.

V = tank capacity, gallons

N = number of turnovers per year = Annual throughput (gal) divided by tank capacity, V

K_N = turnover factor; for $N > 36$, $K_N = (180 + N)/6N$. For $N \leq 36$, $K_N = 1$

53.a.i. Annual emission from FIXTANK is the sum of emissions from individual fixed roof storage tanks:

$$E_{\text{FIXTANK, ANNUAL}} = \sum L_{\text{FIXTANK}} / 2000 \text{ (tons/year)}$$

53.b. Except as provided in condition 53.g, VOC emissions from each external floating roof storage tank grouped under the emissions unit EXTANK shall be calculated based on the following AP42 algorithms:

$$(2) \quad L_{\text{EXTANK}} = L_R + L_{\text{WD}} + L_{\text{RF}} \text{ (lbs/yr)}$$

$$(3) \quad L_R = \text{rim seal loss} = K_S v^n P^* D M_V K_C$$

$$(4) \quad L_{\text{WD}} = \text{withdrawal loss} = \frac{(0.943) Q C_F W_L}{D} [1 + (N_C F_C)/D]$$

$$L_{\text{RF}} = \text{roof fitting loss} = F_F P^* M_V K_C$$

where: K_S = seal factor for average of tight fit, see TABLE-4, Attachment 2
 v = average wind speed at the tank site; may use the nearest local weather station data; or default = 7 mph (3 meter/sec.; reference - 1993 DEQ Annual Report, pg. 7)
 n = seal-related wind speed exponent, see TABLE-4, Attachment 2
 K_C = product factor; for crude oil, $K_C = 0.4$. For all other organic liquids, $K_C = 1.0$.
 Q = annual throughput, bbl/yr
 C_F = shell clingage factor, bbl/1000 ft², see TABLE-5, Attachment 2
 W_L = liquid density, lbs/gal
 N_C = number of columns, dimensionless, $N_C = 0$ for external floating roof tank.
 Therefore, the last part "[1 + (N_C F_C)/D]" of equation (4) drops out.
 P , P_A , D , M_V , etc. are as defined for equation (1) of this condition.

$$P^* = \text{vapor pressure function} = \frac{(P/P_A)}{[1 + [1 - (P/P_A)]^{0.5}]^2}$$

$$F_F = \text{total roof fitting loss factor (lb-mol/yr)} \\ = [(N_{F1} K_{F1}) + (N_{F2} K_{F2}) + \dots + (N_{Fn} K_{Fn})], \text{ where:}$$

N_{Fi} = number of roof fittings of a particular type ($i = 0, 1, 2, \dots, n$), dimensionless, see Tables 6, 7, and 8, Attachment 2

n = total number of different types of fittings, dimensionless

K_{Fi} = roof fitting loss factor for a particular type of fitting ($i = 0, 1, 2 \dots n$),
 lb-mol/yr.

For individual fitting types, K_{Fi} can be estimated as follows:

$$K_{Fi} = K_{fai} + K_{fbi} v^{mi}, \text{ where;}$$

K_{fai} = loss factor for a particular type of roof fitting
 (lb-mol/yr), see TABLE-6, Attachment 2

K_{fbi} = loss factor for a particular type of roof fitting
 (lb-mol/yr [mph]^m), see TABLE-6, Attachment 2

v = average wind speed, mph

m_i = loss factor for a particular type of roof fitting
 see TABLE-6, Attachment 2

53.b.i. Annual emission from EXTANK is the sum of emissions from individual external floating roof storage tanks:

$$E_{EXTANK, ANNUAL} = \sum L_{EXTANK} / 2000 \text{ (tons/year)}$$

53.c. Except as provided in condition 53.g, VOC emissions from each internal floating roof storage tank grouped under the emissions unit INTANK shall be calculated based on the following AP42 algorithms:

$$^{(5)} L_{INTANK} = L_R + L_{WD} + L_F + L_D \text{ (lbs/yr)}$$

L_R is as defined in equation (3) where $n = 0$; $v^n = 1$: wind does not affect $L_{R, INTANK}$

L_{WD} is as defined in equation (4).

$$L_F = \text{deck fitting loss} = F_F P^* M_V K_C$$

$$L_D = \text{deck seam loss} = K_D S_D D^2 P^* M_V K_C$$

where: F_F = total deck fitting loss factor = $[(N_{F1} K_{F1}) + (N_{F2} K_{F2}) + \dots + (N_{Fn} K_{Fn})]$

N_{Fi} = number of deck fittings of a particular type, see Tables 3 and 9, Attachment 2

K_{Fi} = deck fitting loss factor for a particular type, see TABLE 9, Attachment 2

n = total number of different types of fittings

N_C = number of columns, dimensionless. For internal floating roof tank with column-supported fixed roof, N_C = use tank-specific information, or see TABLE-3, Attachment 2

F_C = effective column diameter, feet (column perimeter/ π). For internal floating roof tank with column-supported fixed roof, use tank-specific effective column diameter, or $F_C = 1.1$ for 9-inch by 7-inch built-up columns; 0.7 for 8-inch-diameter pipe columns, and 1.0 if column construction details are not known.
 K_D = deck seam loss per unit seam length factor = 0 for welded deck; 0.34 for bolted deck
 S_D = deck seam length factor = total length of deck seams divided by the area of the deck; if not known, refer to TABLE 10, Attachment 2
 P , P_A , D , M_v , K_C , etc. are as defined for equation (2) of this condition

53.c.i. Annual emission from INTANK is the sum of emissions from individual internal floating roof storage tanks:

$$E_{\text{INTANK, ANNUAL}} = \sum L_{\text{INTANK}} / 2000 \text{ (tons/year)}$$

53.d. VOC emissions from marine loading operations, including the lightering operations, grouped under the emissions unit MLOAD shall be calculated based on the following AP42 algorithms:

$$(6) \quad L_{\text{MLOAD}} = (1 - \text{eff}) Q \text{ EF} \text{ (lbs/unit time)}$$

53.d.i. Annual emission from MLOAD is calculated by substituting annual throughput, Q (10^3 gal), in equation (6):

$$E_{\text{MLOAD, ANNUAL}} = L_{\text{MLOAD}} / 2000 \text{ (tons/year)}$$

	EF (lbs/ 10^3 gal)	
	Tank Ship & Ocean barges	Barges
Gasoline	2.6	3.9
Jet Kerosene	0.013	
Dist. Oil No.2	0.012	
Res. Oil No.6	9×10^{-5}	
Naphtha	3.875	
VGO	5.5×10^{-3}	
Ethanol	0.342	

53.e. VOC emissions from tanker truck/trailer loading operations grouped under the emissions unit TRACK shall be calculated by using the equation (7) below, which is based on the same AP42 algorithms of item 53.d of this condition, in addition to the efficiency (eff.) determined from the source test:

$$(7) \quad L_{\text{TRACK}} = (1 - \text{eff./100}) Q D_L \text{ (lbs/unit time)}$$

$$D_L = \text{displacement loss} = 12.46 (S P MW) / T \quad (\text{lbs}/10^3 \text{ gal})$$

where: Q = throughput in "x1000" gallon
S = saturation factor, see TABLE-11, Attachment 2
P = true vapor pressure of liquid loaded, psia (see equation "P" below, only if conversion of Reid vapor pressure (P_{RVP}) to true vapor pressure (P) is needed)
MW = molecular weight of vapors. For gasoline (mixture) with known P_{RVP} ;
 $MW_{GAS} = 72.833 - 1.3183(P_{RVP}) + 0.15079(P_{RVP})^2 - 0.0087302(P_{RVP})^3$
T = stock temperature, °R (= °F + 459.6)
 $P = \exp[(0.7553 - 413/T) S_D^{1/2} \log(P_{RVP}) - (1.854 - 1042/T) S_D^{1/2} + (2416/T - 2.013) \log(P_{RVP}) - (8742/T) + 15.64]$
where: P_{RVP} = Reid vapor pressure, psia
 S_D = slope of American Society for Testing and Materials distillation curve at 10% evaporated. For gasoline, $S_D = 3$
eff. = the over-all control efficiency (%) of the vapor recovery unit (VRU), as determined from source testing.

53.e.i. Annual emission from TRACK is calculated by substituting annual throughput, Q, in equation (7):

$$E_{\text{TRACK, ANNUAL}} = L_{\text{TRACK}} / 2000 \quad (\text{tons/year})$$

53.e.ii. Annual fugitive emission from TRACK is calculated by substituting annual throughput, Q, in the equation below:

$$E_{\text{TRACK, ANNUAL FUGITIVE}} = 10.79 \times 10^{-2} Q / 2000 \quad (\text{tons/year})$$

53.f. VOC emissions from auxiliary material handling equipment grouped under the emissions unit FGTVOG shall be calculated using the equation (8), based on emission factors (EF_i) provided in the EPA publication (EPA-453/R-95-017); "Protocol for Equipment Leak Emission Estimate."

$$(8) \quad L_{\text{FGTVOC}} = \sum [N_i \text{ EF}_i] \quad (\text{lbs/hr})$$

where: N_i = number of component "i"
 EF_i = EPA emission factor for component "i", lbs_{VOC}/hr

Component ("i") Type	Average Emission Factor, EF _i (lbs/hr-component)	
	Light Liquid	Gas
Valves	9.44×10^{-5}	2.85×10^{-5}
Pump Seals	1.19×10^{-3}	1.43×10^{-4}
Compressors and Others	2.85×10^{-4}	2.63×10^{-4}
Fittings (connectors & flanges)	1.76×10^{-3}	9.22×10^{-5}

53.f.i. Annual emission from FGTVOG is calculated as follow:

$$E_{\text{FGTVOC, ANNUAL}} = (8760/2000) L_{\text{FGTVOC}} \text{ (tons/year)}$$

53.f.ii. The permittee shall update the number of component "i" at the time of permit renewal or major modification, whichever is sooner.

53.g. For emissions units FIXTANK, EXTANK, and/or INTANK, the permittee may use approved EPA Tank software, which is based on AP42 algorithms identified in Condition 53, to calculate the VOC emissions.

TEST METHODS AND PROCEDURES [OAR 340-218-0050(1)]

54. Unless otherwise specified in this permit, all testing shall be conducted in accordance with the Department's Source Sampling Manual. [OAR 340-212-0120]

55. Although source testing is not required by this permit for the permit conditions listed below, if source testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods and averaging times to measure the pollutant emissions:

Cond. No.	Test Method	Averaging Time	Special Conditions
42	ODEQ Methods 5, 7, or 8	average of three one-hour test runs	ODEQ Method 8 is for sources with exhaust gases at essentially ambient conditions (e.g. material handling cyclones); ODEQ Method 7 is for direct contact combustion or other heat sources (e.g., particle and veneer dryers); ODEQ Method 5 is for indirect contact fuel burning equipment (e.g., boilers) and any other source.
40	Modified EPA Method 9 in accordance with	aggregate of three (3) minutes in any 60 minute period	Each Method 9 observation shall represent a period of 15 seconds for the purpose of determining the aggregate amount of time in 60 minute period that the visible emissions are greater than the opacity limit. The test duration may be less than 60 minutes if a violation of the standard is documented before the full 60 minute observation period is completed.
39	the Department's Source Sampling Manual	aggregate of thirty (30) seconds in any 60 minute period	
20, 41	ODEQ Method 5	average of three test runs	The sample time for each test run shall be no less than one hour (31.8 dscf) and no longer than eight hours.

RECORDKEEPING REQUIREMENTS [OAR 340-218-0050(3)(b)]

56. Along with the monitoring requirements, recordkeeping requirements are listed elsewhere in the permit, usually right after the applicable requirement. In general, the permittee shall maintain the following records of monitoring required by this permit:

56.a. the date, place as defined in the permit, and time of sampling or measurements;

- 56.b. the date(s) analyses were performed;
- 56.c. the company or entity that performed the analyses;
- 56.d. the analytical techniques or methods used;
- 56.e. the results of such analyses;
- 56.f. the operating conditions as existing at the time of sampling or measurement;
- 56.g. the records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibrations drift checks);
- 56.h. monthly and annual records of product types and throughputs from MLOAD and TRACK;
- 56.i. monthly and annual records of product types and throughputs for each tank grouped under FIXTANK, EXTANK, and INTANK;
- 56.j. daily, monthly, and annual records of the type and amount of fuel used in BOILER;
- 56.k. fuel sulfur analyses results or certificates, if any;
- 56.l. complaint log and investigation reports, if any;
- 56.m. visible emissions observation records, if any;
- 56.n. records of all inspections and inspection results, as required by this permit; and
- 56.o. records of all physical data and operating parameters used to determine compliance with the applicable requirements of this permit.

57. Unless otherwise specified by permit condition, the permittee shall make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) shall not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering that a required record is missing, the permittee shall document the reason for the missing record. In addition, any missing record that can be recovered from other available information shall not be considered a missing record. [OAR 340-214-0110, 340-212-0160, and 340-218-0050(3)(b)]
58. Except as noted in condition 33.a, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit shall also be retained for five (5) years from the date of the monitoring, sample collection, measurement, report, or application.

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REPORTING REQUIREMENTS [OAR 340-218-0050(3)(c)]

Due July 31st. & Feb. 15

59. SEMI-ANNUAL REPORTING REQUIREMENTS: The permittee shall submit four (4) copies of the semi-annual monitoring report by July 31, unless otherwise approved in writing by the Department. The semi-annual monitoring report shall include the following information:

- 59.a. The first semi-annual compliance certification for the period January 1 through June 30 [OAR 340-218-0080] and the information specified in forms R1002 and R1003 for the same period. All instances of deviations from permit requirements shall be clearly identified in such report.
- 59.b. The permittee may use forms supplied by the Department or equivalent forms approved by the Department.

59.c. One copy of the semi-annual report shall be submitted to the DEQ Air Quality Division, two copies to the DEQ Northwest regional office, and one copy to the EPA Region X office.

60. ANNUAL REPORTING REQUIREMENTS: The permittee shall submit four (4) copies of the annual monitoring report by February 15, unless otherwise approved in writing by the Department. The annual monitoring report shall include the following information:

60.a. The second semi-annual compliance certification for the period July 1 through December 31 [OAR 340-218-0080] and the information specified in forms R1002 and R1003 for the same period. All instances of deviations from permit requirements shall be clearly identified in such reports.

60.b. The emission fee report [OAR 340-220-0100]

60.c. The emission statement, if applicable [OAR 340-214-0220]

60.d. The excess emissions upset log, if applicable [OAR 340-214-0340]

60.e. The annual certification that the risk management plan is being properly implemented, if triggered; OAR 340-244-0230. [OAR 340-218-0080(7)]

60.f. The permittee may use forms supplied by the Department or equivalent forms approved by the Department;

60.g. One copy of the annual report shall be submitted to the Air Quality Division, two copies to the Northwest regional office, and one copy to the EPA Region X office.

60.h. Source-specific annual reporting requirements as specified elsewhere throughout the permit include the following:

EMISSIONS UNIT	ANNUAL PARAMETERS	UNIT
FIXTANK	VOC emissions Products throughput	tons/yr gallons/yr
EXTANK	VOC emissions Products throughput	tons/yr gallons/yr
INTANK	VOC emissions Products throughput	tons/yr gallons/yr
MLOAD	VOC emissions Products throughputs	tons/yr gallons/yr
TRACK	VOC emissions Products throughputs	tons/yr gallons/yr
FGTVOC	VOC emissions	tons/yr
BOILER	PM ₁₀ , SO ₂ , NO _x , CO, & VOC emissions, NG and fuel oil usage	tons/yr 10 ⁶ ft ³ /yr, gal/yr

60.h.i. "End of the month summary" of annual VOC emissions from each of the emissions units FIXTANK, EXTANK, INTANK, MLOAD, TRACK, and the annual products throughputs associated with each emissions unit identified ;

60.h.ii. annual VOC emissions from FGTVOC; and

60.h.iii. "End of the month summary" of annual emissions of criteria pollutants from BOILER and associated fuel usage.

61. The permittee shall submit the following additional reports and/or information to the DEQ - Northwest Region as required by specific conditions within the permit:
 - 61.a. Monthly RVP-report during the control period, as specified in condition 10;
 - 61.b. source test plans/notifications prior to conducting actual test/measurements;
 - 61.c. source test results within 45 days after the source test was done; and
 - 61.d. when requested by the Department, submit all relevant records, data, and support information maintained at the plant site per recordkeeping requirements of conditions 56 through 58.
62. The (first & second) semi-annual compliance certification shall include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
 - 62.a. The identification of each term or condition of the permit that is the basis of the certification;
 - 62.b. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required under OAR 340-218-0050(3). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
 - 62.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, based on the method or means designated in OAR 340-218-0040(6)(c)(B). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
 - 62.d. Such other facts as the Department may require to determine the compliance status of the source.
63. Notwithstanding any other provision contained in any applicable requirement, the owner or operator may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]
64. Excess Emissions Reporting [OAR 340-214-0300 through 340-214-0360]
 - 64.a. The permittee shall report all excess emissions in accordance with OAR 340-214-0300 through 340-214-0360. In summary, the permittee shall immediately (i.e., as soon as possible but in no case more than one hour after the beginning of the excess emission period) notify the Department by telephone or in person of any excess emission, other than pre-approved startup, shutdown, or scheduled maintenance. Notification shall, to the extent reasonably ascertainable at the time of notification, include the source name, nature of the emissions problem, name of the person making the report, name and telephone number of the contact person for further information, date and time of the onset of the upset condition, whether or not the incident was planned, the cause of the excess emission (e.g., startup, shutdown, maintenance, breakdown, or other), equipment involved in the

upset, estimated type and quantity of excess emissions, estimated time of return to normal operations, efforts made to minimize emissions, and a description of remedial actions to be taken. Follow-up reporting shall be made in accordance with Department direction and OAR 340-214-0330(2) and 340-214-0340.

- 64.b. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee shall immediately notify the Department by calling the Oregon Accident Response System at 1-800-452-0311.
- 64.c. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee shall submit startup, shutdown, or scheduled maintenance procedures used to minimize excess emissions to the Department for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures shall be received by the Department in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee shall abide by the approved procedures and have a copy available at all times.
- 64.d. The permittee shall notify the Department of planned startup/shutdown or scheduled maintenance events only if required by permit condition or if the source is located in a nonattainment area for a pollutant which may be emitted in excess of applicable standards.
- 64.e. The permittee shall maintain and submit to the Department a log of planned and unplanned excess emissions, on Department approved forms, in accordance with OAR 340-214-0340.
- 65. The permittee shall promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within seven (7) days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 shall be reported in accordance with OAR 340-214-0340. [OAR 340-218-0050(3)(c)(B)]
- 66. The permittee shall submit any required source test report within 30 days after the source test, unless otherwise approved in the source test plan. [OAR 340-218-0050(3)(c)(C) and 340-212-0120]
- 67. All required reports shall be certified by a responsible official consistent with OAR 340-218-0040(5); OAR [OAR 340-218-0050(3)(c)(D)]
- 68. Reporting requirements shall commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]
- 69. Addresses of regulatory agencies are the following, unless otherwise instructed:

DEQ – Northwest Region	DEQ - Air Quality Division	Air Compliance Division US Environmental Protection Agency
2020 S.W. 4th Avenue, #400 Portland, OR 97201-5884	811 SW Sixth Avenue Portland, OR 97204	Mail Stop OAQ-107 1200 Sixth Avenue Seattle, WA 98101
(503) 229-5263	(503) 229-5359	--

NON-APPLICABLE REQUIREMENTS

70. Divisions of Chapter 340, Air Quality Oregon Administrative Rules (OARs), currently determined not applicable to the permittee are listed below. [OAR 340-218-0110]

70.a. The following OARs are not applicable because the source is not in the source category cited in the rules:

Division	202	All
Division	216	All
Division	218	0090, 0100
Division	224	All
Division	230	All
Division	232	0130, 0140, 0160, 0170 through 0240
Division	234	All
Division	236	All
Division	238	0100
Division	244	0200
Division	248	All
Division	256	All
Division	260	All

70.b. The following OARs are not applicable because the source is outside the special control area, non-attainment area or county cited in the rules:

Division	210	0210, 0220
Division	222	0042
Division	240	All
Division	264	0100, 0120, 0140, 0150, 0160, 0170

70.c. The following OARs are not applicable because the source does not have specific emissions units cited in the rules:

Division	212	0200 through 0280
Division	226	0310
Division	228	0300
Division	264	0190

70.d. The following OARs are not applicable because the source does not sell, distribute, use, or make available for use, the fuel type cited in the rules:

Division	228	0100, 0120, 0130
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70.e. The following OARs are not applicable because no apparent changes have been made or the method/procedure is not used by the facility:

Division	222	0050
Division	224	0050 through 0100
Division	226	0400

Division 244 0110, 0120, 0130, 0140, 0180
Division 268 0030

71. The following federal regulations are not applicable to the permittee at the time of permit issuance because the source is not in the source category cited in the rules:

40 CFR Part 55, 57, 68, 72, 73, 75, 76,
40 CFR Part 60 (except subparts A, K, Ka, and the Appendices),
40 CFR Part 63 (except subparts A, M, and the Appendices),
40 CFR Part 61 (except subparts A and M and the Appendices),
40 CFR Part 82 (except subpart F),
40 CFR Parts 85 through 89,
Section 129 of the FCAA, Solid Waste,
Section 183(e) of the FCAA, Consumer and commercial products,
Section 183(f) of the FCAA, Tank Vessels.

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the version of the following materials are effective as of the dates noted unless otherwise specified in the permit:

- a. Source Sampling Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A4;
- b. Continuous Monitoring Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A6; and
- c. All State and Federal regulations as in effect on the date of issuance of this permit.

G3. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee shall comply with all conditions of the federal operating permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G4. Credible Evidence:

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G5. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(d), and 340-218-0080(2)]

Any document submitted to the Department pursuant to this permit shall contain certification by a responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee shall promptly, upon discovery, report to the Department a material error or omission in these records, reports, plans, or other documents.

G6. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

G7. Asbestos [40 CFR Part 61, Subpart M (Federally enforceable), OAR 340-248-0210 through 340-248-0280 and OAR Chapter 340, Division 248 (State-only enforceable)]

The permittee shall comply with OAR 340-248-0210 through 340-248-0280, OAR Chapter 340 Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G8. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G9. Permit Shield [OAR 340-218-0110]

a. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that:

- i. such applicable requirements are included and are specifically identified in the permit, or
- ii. the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

b. Nothing in this rule or in any Federal Operating Permit shall alter or affect the following:

- i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
- ii. the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. the applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
- iv. the ability of the Department to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).

c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), or significant permit modification.

G10. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department of Environmental Quality, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. enter upon the permittee's premises where an Oregon Title V operating permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. as authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G11. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee shall pay an annual base fee and an annual emission fee for all regulated air pollutants except for carbon monoxide, any class I or class II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act, or any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the Federal Clean Air Act. The permittee shall submit payment to the Department of Environmental Quality, Business Office, 811 SW 6th Avenue, Portland, OR 97204, within 30 days of the date the Department mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes shall be submitted in writing to the Department of Environmental Quality. Payment shall be made regardless of the dispute. User-based fees shall be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G12. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee shall monitor for, and record, any off-permit change to the source that:
 - i. is not addressed or prohibited by the permit;
 - ii. is not a Title I modification;
 - iii. is not subject to any requirements under Title IV of the FCAA;
 - iv. meets all applicable requirements;
 - v. does not violate any existing permit term or condition; and
 - vi. may result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), shall be submitted to the Department and the EPA.
- c. The permittee shall keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of condition G11 shall not extend to off-permit changes.

G13. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee shall monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. violate an applicable requirement;

- ii. contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. be a Title I modification.
- b. A minimum 7-day advance notification shall be submitted to the Department and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of condition G11 shall not extend to section 502(b)(10) changes.

G14. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit shall be requested and granted in accordance with OAR 340-218-0150. The permittee shall promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. sale or exchange of the activity or facility.

G15. Minor Permit Modification [OAR 340-218-0150]

The permittee shall submit an application for a minor permit modification in accordance with OAR 340-218-0150.

G16. Significant Permit Modification [OAR 340-218-0180]

The permittee shall submit an application for a significant permit modification in accordance with OAR 340-218-0180

G17. Staying Permit Conditions [OAR 340-218-0050(6)(e)]

Notwithstanding condition G14 and G15, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G18. Construction/Operation Modification [OAR 340-210-0205]

No permittee shall construct or make modifications required to be reviewed under OAR 340-218-0190, the construction/operation modification rules, without receiving a Notice of Approval in accordance with OAR 340-218-0190. The permittee should allow 60 days for Department review of applications for a construction/operation modification if public notice is not required, or 180 days if public notice is required.

G19. New Source Review Modification [OAR 340-224-0010]

No permittee shall construct or make modifications required to be reviewed under New Source Review (OAR 340-224-0010(1)) without receiving an Air Contaminant Discharge Permit (ACDP) (OAR 340-216-0010). The permittee should allow 180 days for Department review of an ACDP application for New Source Review.

G20. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G21. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records required to be retained by the permit.

G22. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the Department.
- b. The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- c. A permit shall be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- d. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.

G23. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G24. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted as described below.
- b. Applications for renewal shall be submitted at least 12 months before the expiration of this permit, unless the Department requests an earlier submittal. If more than 12 months is required to process a permit renewal application, the Department shall provide no less than six (6) months for the owner or operator to prepare an application. Provided the permittee submits a timely and complete renewal application, this permit shall remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G25. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G26. Property Rights [OAR 340-200-0020(9)(c) and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G27. Permit Availability [OAR 340-200-0020(9)(c) and 340-218-0120(2)]

The permittee shall have available at the facility at all times a copy of the Oregon Title V Operating Permit and shall provide a copy of the permit to the Department or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Northwest Region
2020 S.W. 4th Avenue, #400
Portland, OR 97201-5884
Telephone: (503) 229-5263

ATTACHMENT 1

I. Test Methods and Compliance Procedures

The methods and procedures outlined in this Attachment-1 are for determining compliance with the mass emission limitations (e.g., 80 mg/L, 35 mg/L, or 10 mg/L) applicable to TRACK, or the alternative control requirements (e.g., 95% VOC reduction) applicable to the storage tanks as identified in the permit:

1. Immediately prior to a performance test required to determine compliance with the mass emission limitation of 80 mg/L specified in condition 24.a.i, all potential sources of vapor and liquid leakage from the terminal's vapor collection system equipment shall be monitored for leaks according to the procedures outlined in Section II. of this Attachment 1. The monitoring shall be conducted only while a gasoline tank truck is being loaded; and all leaks shall be repaired prior to conducting the performance test.

A reading of 10,000 parts per million by volume (ppmv) or greater as methane shall be considered a leak, for the purpose of determining compliance with the VOC limits specified in Condition 24.a.i.

2. The test procedure is as follows:

- 2.a. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

- 2.b. The time period for a performance test shall be not less than 6 hours, during which at least 300,000 L (80,000 gal) of gasoline are loaded. If the throughput criterion is not met during the initial 6 hours, the test shall either continue until the throughput criterion is met, or resumed the next day with another complete 6 hours of testing. As much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.

- 2.c. For intermittent vapor control systems:

- 2.c.i. The vapor holder level shall be recorded at the start of the performance test. The end of the performance test shall coincide with a time when the vapor holder is at its original level.

- 2.c.ii. At least two startups and shutdowns of the vapor processor shall occur during the performance test. If this does not occur under automatically controlled operation, the system shall be manually controlled.

- 2.d. An emission testing interval shall consist of each 5-minute period during the performance test. For each interval:

- 2.d.i. The reading from each measurement instrument shall be recorded.

- 2.d.ii. The volume exhausted (V_{es}) and the average total organic compounds concentration (C_e) in the exhaust vent shall be determined, as specified in the appropriate test method. The average total organic compounds concentration shall correspond to the volume measurement by taking into account the sampling system response time.

- 2.e. The mass emitted during each testing interval shall be calculated as follows:

$$M_{ei} = 10^{-6} K V_{es} C_e$$

where: M_{ei} = Mass of total organic compounds (milligrams [mg]) emitted during testing interval i .
 V_{es} = Volume of air-vapor mixture exhausted (cubic meters [m^3]), at standard conditions.
 C_e = Total organic compounds concentration (measured as carbon) at the exhaust vent (ppmv).
 K = Density of calibration gas (milligrams/cubic meter [mg/m^3]) at standard conditions
(1.83×10^6 for propane; 2.41×10^6 for butane).
 s = Standard conditions, 20°C and 760 millimeters of mercury (mm Hg).

2.f. The total organic compounds mass emissions shall be computed as follows:

$$E = \sum_{i=1}^n M_{ei} / L$$

where: E = Mass of total organic compounds emitted per volume of gasoline loaded, mg/L.
 L = Total volume of gasoline loaded, L.
 n = Number of testing intervals.

2.g. In determining the volume (L) of gasoline dispensed during the performance test, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.

2.h. In determining volume (V_{es}) at the exhaust vent:

- 2.h.i. Method 2B for combustion vapor control systems.
- 2.h.ii. Method 2A for all other vapor control systems.

2.i. In determining total organic compounds concentration (C_e) at the exhaust vent, at each interval, Method 25A or 25B. The calibration gas shall be either propane or butane. The permittee may adjust the emission results to exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the Department.

II. Leak Detection Methods for Volatile Organic Compounds

3. Permittee is required to carry out a leak detection monitoring program in accordance with the following methods and procedures:

- 3.a. Monitoring shall be performed in accordance with Method 21 of 40 CFR Part 60, Appendix A.
- 3.b. The detection instrument shall meet the performance criteria of Method 21.
- 3.c. The detection instrument shall be calibrated before and after use on each day of its use by the methods specified in Method 21. Failure to achieve a post-use calibration precision of less than 10 percent shall constitute grounds for rejecting all tests performed since the last pre-use calibration. In such cases, required leak tests must be re-performed.
- 3.d. Calibration gases shall be:
 - 3.d.i. Zero air (less than 10 parts per million [ppm] of hydrocarbon in air).

- 3.d.ii. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
 - 3.e. The detection instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- 4. When equipment is tested for compliance with the requirement that there be no detectable emissions, the test shall comply with the following:
 - 4.a. The requirements outlined in the Section II condition 3 of this attachment shall apply and shall be met; and
 - 4.b. The background level shall be determined as set forth in Method 21.
- 5. Guidance documents for Leak detection tests include the following:
 - 5.a. "APTI Course SI 417-Controlling Volatile Organic Compound Emissions from Leaking Process Equipment," EPA-450/2-82-015.
 - 5.b. "Portable Instrument User's Manual for Monitoring VOC Sources," EPA-340/1-86-015.
 - 5.c. "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and HAP," EPA-450/3-88-010.
 - 5.d. "Petroleum Refinery Enforcement Manual," EPA-340/1-80-008.
- 6. Use of adaptations to test methods

Use of an adaptation to any of the analytical methods specified in conditions 3 through 4 of this attachment 1 shall be approved in writing by the Department on a case-by-case basis. The permittee shall submit sufficient documentation for the Department to find that the analytical methods specified in conditions 3 through 4 of this attachment 1 will yield inaccurate results and that the proposed adaptation is appropriate.

ATTACHMENT 2

TABLE-1. Paint Factors for Fixed Roof Tanks

TANK COLOR		PAINT FACTOR (F_p) Paint Condition	
Roof	Shell	Good	Poor
White	White	1.00	1.15
Aluminum (specular)	White	1.04	1.18
White	Aluminum (specular)	1.16	1.24
Aluminum (specular)	Aluminum (specular)	1.20	1.29
White	Aluminum (diffuse)	1.30	1.38
Aluminum (diffuse)	Aluminum (diffuse)	1.39	1.46
White	Gray	1.30	1.38
Light gray	Light gray	1.33	1.44 ^a
Medium gray	Medium gray	1.40	1.58 ^a

^a Estimated from the ratios of the seven preceding paint factors.

TABLE-2. Average Annual Storage Temperature
as a Function of Tank Paint Color

Tank color	Average Annual Storage Temperature, T_s
White	$T_A + 0^a$
Aluminum	$T_A + 2.5$
Gray	$T_A + 3.5$
Black	$T_A + 5.0$

^a T_A is the average annual ambient temperature in °F.

NOTE: True vapor pressure for organic liquids are determined at the stored liquid temperature, T_s , which may be calculated by knowing the color of the tank and the average ambient temperature, T_A .

TABLE-3. Typical Number of Columns (N_c) as a Function of Tank Diameter (D , in feet) for Internal Floating Roof Tanks with Column-Supported Fixed Roofs^a

Tank Diameter Range, D (feet)	Typical Number of Columns, N_c	Tank Diameter Range, D (feet)	Typical Number of Columns, N_c	Tank Diameter Range, D (feet)	Typical Number of Columns, N_c
0 - 85	1	150 - 170	16	270 - 275	43
85 - 100	6	170 - 190	19	275 - 290	49
100 - 120	7	190 - 220	22	290 - 330	61
120 - 135	8	220 - 235	31	330 - 360	71
135 - 150	9	235 - 270	37	360 - 400	81

^a This table was derived from a survey of users and manufacturers. The actual number of columns in a particular tank may vary greatly with age, fixed roof style, loading specifications, and manufacturing prerogative. Data in this table should not supersede information on actual tanks

TABLE-4. Rim Seal Loss Factors ^a

Tank Construction and Rim Seal System	Average Fitting Seals		Tight Fitting Seals ^b	
	K _s (lb-mol/ [mph] ⁿ ft yr)	n	K _s (lb-mol/ [mph] ⁿ ft yr)	n
<u>Welded external floating Rim Seal System:</u>				
1. Mechanical shoe seal				
a. Primary only	1.2 ^c	1.5 ^c	0.8	1.6
b. Shoe-mounted secondary	0.8	1.2	0.8	1.1
c. Rim-mounted secondary	0.2	1.0	0.2	0.9
2. Liquid-mounted resilient filled seal				
a. Primary only	1.1	1.0	0.5	1.1
b. Weather shield	0.8	0.9	0.5	1.0
c. Rim-mounted secondary	0.7	0.4	0.5	0.5
3. Vapor-mounted resilient filled seal				
a. Primary only	1.2	2.3	1.0	1.7
b. Weather shield	0.9	2.2	1.1	1.6
c. Rim-mounted secondary	0.2	2.6	0.4	1.5
<u>Riveted external floating roof tanks:</u>				
1. Mechanical shoe seal				
a. Primary only	1.3	1.5	d	-
b. Shoe-mounted secondary	1.4	1.2	d	-
c. Rim-mounted secondary	0.2	1.6	d	-
<u>Internal floating roof tanks^e:</u>				
1. Liquid-mounted resilient seal				
a. Primary seal only	3.0	0	2.6	0
b. With rim-mounted secondary seal	1.6	0	1.2	0
2. Vapor-mounted resilient seal				
a. Primary seal only	6.7 ^f	0	5.6	0
b. With rim-mounted secondary seal	2.5	0	2.3	0

^a The rim seal factors (K_s, n) may be used for wind speeds from 2 to 15 mph.

^b No gaps more than 1/8 inch wide between the rim seal and the tank shell. Tight-fitting seal condition is unusual and difficult to verify.

^c If no specific information is available, a welded tank with an average-fitting mechanical shoe primary seal only can be assumed to represent the most common or typical tank construction and rim seal system in use.

^d No evaporative loss information is available for riveted tanks with consistently tight-fitting rim seal.

^e Based on emissions from tank seal systems in reasonable good working condition, no visible holes, tears, or unusually large gaps between the seals and the tank wall.

^f If no specific information is available, a vapor-mounted primary seal only can be assumed to represent the most common or typical seal system in use.

TABLE-5. Average Clingage factors (bbl/1000 ft²)

Liquid	Light Rust ^a	Shell Condition	
		Dense Rust	Gunitite Lined
Gasoline	0.0015	0.0075	0.15
Single-component stocks	0.0015	0.0075	0.15
Crude oil	0.0060	0.030	0.60

^a If no specific information is available, these values can be assumed to represent the most common condition of tanks currently in use.

TABLE-6. External Roof Fitting Loss Factors and Typical Number of Roof fittings^a

Roof Fitting Type and Construction Details	Roof Fitting Loss Factors			Typical Number of Fittings, N_r^b
	K_{fa} lb-mol/yr	K_{fb} lb-mol/yr	m --	
1. Access hatch (24-inch diameter well)				1
a. Bolted cover, gasketed	0.0	0.0	0.0 ^b	
b. Unbolted cover, ungasketed	2.7	7.1	1.0	
c. Unbolted cover, gasketed	2.9	0.41	1.0	
2. Guide-pole well (8-inch diameter unslotted pole, 21-inch diameter well)				1
a. Ungasketed sliding cover	0	67	0.98 ^b	
b. Gasketed sliding cover	0	3.0	1.4	
3. Guide-pole/sample well (8-inch-diameter unslotted pole, 21-inch-diameter well)				c
a. Ungasketed sliding cover, without float	0	310	1.2	
b. Ungasketed sliding cover, with float	0	29	2.0	
c. Gasketed sliding cover, without float	0	260	1.2	
d. Gasketed sliding cover, with float	0	8.5	2.4	
4. Gauge float well (20-inch-diameter well)				1
a. Unbolted cover, ungasketed	2.3	5.9	1.0 ^b	
b. Unbolted cover, gasketed	2.4	0.34	1.0	
c. Bolted cover, gasketed	0	0	0	
5. Gauge hatch/sample well (8-inch-diameter well)				1
a. Weighted mechanical actuation, gasketed	0.95	0.14	1.0 ^b	
b. Weighted mechanical actuation, ungasketed	0.91	2.4	1.0	
6. Vacuum breaker (10-inch-diameter well)				see Table-7
a. Weighted mechanical actuation, gasketed	1.2	0.17	1.0 ^b	
b. Weighted mechanical actuation, ungasketed	1.1	3.0	1.0	
7. Roof drain (3 inch diameter)				see Table-7
a. Open	0	7.0	1.4 ^c	
b. Closed, 90%	0.51	0.81	1.0 ^c	
8. Roof leg (3-inch-diameter leg)				see Table-8
a. Adjustable, pontoon area	1.5	0.20	1.0 ^b	
b. Adjustable, center area	0.25	0.067	1.0 ^b	
c. Adjustable, double-deck roofs	0.25	0.067	1.0	
d. fixed	0	0	0	
9. Roof leg (2.5-inch-diameter)				
a. Adjustable, pontoon area	1.7	0	0	
b. Adjustable, center area	0.41	0	0	
c. Adjustable, double-deck roofs	0.41	0	0	
d. fixed	0	0	0	
10. Rim vent (6-inch diameter)				1.0 ^d
a. Weighted mechanical actuation, gasketed	0.71	0.10	1.0 ^b	
b. Weighted mechanical actuation, ungasketed	0.68	1.8	1.0	

^a The roof fitting loss factors (K_{fa} , K_{fb} , m) may be used only for wind speeds from 2 to 15 mph.

^b If no specific information is available, this value can be assumed to represent the most common or typical roof fittings currently in use.

^c Guide-pole/sample well is an optional fitting not typically used.

^d Rim vents are used only with mechanical shoe primary seals.

^e Roof drains that drain excess rainwater into the product are not used on pontoon floating roofs. They are, however, used on double-deck floating roofs and are typically left "open".

TABLE-7. Typical Number of External Floating Roof Vacuum Breakers and Drains^a

Tank Diameter, feet ^b	Vacuum Breakers		
	Pontoon Roof	Double-deck Roof	Double-deck Roof ^c
50	1	1	1
100	1	1	1
150	2	2	2
200	3	2	3
250	4	3	5
300	5	3	7
350	6	4	--
400	7	4	--

^a This table was derived from a survey of users and manufacturers. The actual number of vacuum breakers may vary greatly depending on throughput and manufacturing prerogatives. The actual number of roof drains may also vary greatly depending on the design rainfall and manufacturing prerogatives. For tanks over 300 feet in diameter, actual tank data or the manufacturer's recommendations may be needed for the number of roof drains. This table should not supersede information based on actual tank data.

^b If the actual diameter is between the diameters listed in this table, use the closest diameter listed. If midway, use the next larger diameter.

^c Roof drains than drain excess rainwater into the product are not used on pontoon floating roofs. They are, however, used on double-deck floating roofs and typically left "open".

TABLE-8. Typical Number of External Floating Roof Legs^a

Tank Diameter, feet ^b	Pontoon Roof		Double- Deck Roof	Tank Diameter, feet ^b	Pontoon Roof		Double- Deck Roof
	Pontoon Legs	Center Legs			Pontoon Legs	Center Legs	
30	4	2	6	210	31	77	98
40	4	4	7	220	32	83	107
50	6	6	8	230	33	92	115
				240	34	101	127
60	9	7	10	250	35	109	138
70	13	9	13	260	36	118	149
80	15	10	16	270	36	128	162
90	16	12	20	280	37	138	173
100	17	16	25	290	38	148	186
				300	38	156	200
110	18	20	29				
120	19	24	34	310	39	168	213
130	20	28	40	320	39	179	226
140	21	33	46	330	40	190	240
150	23	38	52	340	41	202	255
				350	42	213	270
160	26	42	58	360	44	226	285
170	27	49	66	370	45	238	300
180	28	56	74	380	46	252	315
190	29	62	82	390	47	266	330
200	30	69	90	400	48	281	345

^a This table was derived from a survey of users and manufacturers. The actual number of roof legs may vary greatly depending on age, floating roof style, loading specifications, and manufacturing prerogatives. This table should not supersede information based on actual tank data.

^b If the actual diameter is between the diameters listed in this table, use the closest diameter listed. If midway, use the next larger diameter.

TABLE-9. Summary of Internal Floating Deck Fitting Loss Factors and Typical Number of Fittings^a

Deck Fitting Type	Deck Fitting Loss Factor K_F (lb-mole/yr)	Typical No. of Fittings N_F
Access hatch (24-inch diameter)		1
Bolted cover, gasketed	1.6	
Unbolted cover, ungasketed	11	
Unbolted cover, gasketed	25 ^b	
Gauge float well(24-inch-diameter)		1
Bolted cover, gasketed	5.1	
Unbolted cover, gasketed	15	
Unbolted cover, ungasketed	28 ^b	
Column well ^c (24-inch diameter)		(see Table-5)
Built-up column-sliding cover, gasketed	33	
Built-up column-sliding cover, ungasketed	47 ^b	
Pipe column-flexible fabric sleeve seal	10	
Pipe column-sliding cover, gasketed	19	
Pipe column-sliding cover, ungasketed	32.1	
Ladder well ^c (36-inch diameter)		1
Sliding cover, gasketed	56	
Sliding cover, ungasketed	76 ^b	
Deck leg or hanger well		$\{5 + D/10 + (D^2/600)\}^2$
Adjustable	7.9 ^b	
Fixed	0	
Sample pipe or well (24-inch diameter)		1
Slotted pipe-sliding cover, gasketed	44	
Slotted pipe-sliding cover, ungasketed	57	
Sample well-slit fabric seal, 10% open area	12 ^b	
Stub drain (1-inch diameter) ^d	1.2	$(D^2/125)^d$
Vacuum breaker (10-inch diameter)		1
Weighted mechanical actuation, gasketed	0.7 ^b	
Weighted mechanical actuation, ungasketed	0.9	

^a For wind speeds ranging from 2 to 15 mph.

^b If no specific information is available, this value can be assumed to represent the most common/typical deck.

^c Not used in welded contact internal floating decks.

^d D = tank diameter, feet.

TABLE-10. Deck Seam Length Factors for Typical Deck Constructions for Internal Floating Roof Tanks^a

Deck Construction	Typical Deck Seam Length Factors, S_D (ft/ft ²)
Continuous-sheet construction ^b	
5-foot-wide sheets	0.20 ^c
6-foot-wide sheets	0.17
7-foot-wide sheets	0.14
Panel construction ^d	
5 by 7.5-foot rectangular	0.33
5 by 12-foot rectangular	0.28

^a Deck seam loss applies to bolted decks only

^b $S_D = 1/W$, where W = sheet width (feet).

^c If no specific information is available, these factors can be assumed to represent the most common bolted decks currently in use.

^d $S_D = (L + W)/LW$, where W = panel width (feet) and L = panel length (feet).

TABLE-11. Saturation Factors for Calculating Petroleum Liquid Loading Losses

Carrier	Mode of Operation	Saturation Factor
Tank trucks and rail cars	Submerged loading:	
	Clean cargo tank	0.50
	Dedicated normal service	0.60
	Dedicated vapor balance service	1.00
	Splash loading:	
	Clean cargo tank	1.45
	Dedicated normal service	1.45
Marine vessels	Submerged loading:	
	Ships	0.2
	Barges	0.5

REFERENCES:

1. Compilation of Air Pollutant Emissions Factors, AP42, 4th ed., U.S. Environmental Protection Agency, OAQPS, RTP, 9/85.
2. Evaporation Loss from External Floating Roof Tanks, Bulletin 2517, 3rd ed.; API, 2/89.
3. Evaporation Loss from Internal Floating Roof Tanks, Bulletin 2519, 3rd ed., API, 6/83.

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON TITLE V OPERATING PERMIT REVIEW REPORT

Kinder Morgan Liquids Terminals, LLC
Linnton and Willbridge Terminals
5880 NW St. Helens Road
Portland, OR 97210

PSEL CRED	SOURCE TEST	COMS	CEMS	AMB MON	COMP SCHE	SPEC COND	REPORT A S Q M	EXCESS R N	NSPS	NSR	PSD	NESHAP	SIZE
	X						X X X	X	X				T5

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INTRODUCTION

1. In accordance with OAR 340-218-0120(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is intended to provide a more thorough explanation of the factual basis for the permit conditions drafted.
2. PERMIT ACTION SUMMARY: The proposed permit action is a renewal of an existing Title V Permit 26-2028 issued to Kinder Morgan Liquids Terminals, LLC, which is scheduled to expire on January 1, 2004. The proposed permit renewal includes the following revisions:
 - a. Annual PSEL: Recently updated PSEL rules no longer support PSEL less than the general level PSEL. Pursuant to OAR 340-222-0040, although source (i.e., boilers) has no capacity to emit certain pollutants at the generic level specified, those pollutants with capacity to emit less than Significant Emission Rate (SER) receive a generic level PSEL. In Kinder Morgan's case, the annual PSEL for PM₁₀ and CO is set equal to their respective generic level of 14 and 99 tons.
 - b. Baseline MLOAD VOC PSEL: Pursuant to OAR 340-222-0043(2)(b), the baseline emission rate for marine loading operations (MLOAD) has been adjusted down with respect to the MLOAD vapor control emission limit of 95% (by weight) specified at OAR 340-232-0110 that became effective on June 1, 2001.
 - c. For the purpose of practical compliance assurance, the annual PSEL is now based on 12-month rolling average. Appropriately the PSEL monitoring protocols in the permit has been amended to support the rolling annual averaging method. At the end of each month, for a total of 12 times during the calendar year, the permittee must calculate the annual emissions for the previous 12-month period to ensure compliance with the annual PSEL of each regulated pollutant.
 - d. Short-term PSEL: No short-term SER exist for any of the regulated air pollutants in the area where the Kinder Morgan facility is located. Pursuant to OAR 340-222-0042, no short-term PSEL is established in this permit renewal. The monitoring requirements associated with the (previous) short-term PSEL are also purged from the permit.
 - e. Miscellaneous Revisions: Identification of storage tanks and number of fugitive VOC emissions components (e.g., flanges, valves) has been updated. Fugitive emissions associated with the truck/trailer loading operations (TRACK) are now included in the VOC PSEL and the monitoring protocols have been amended to include calculation of fugitive TRACK emissions. Furthermore, AP42 and DEQ emission factors used to calculate the boiler emissions have been updated. Other minor changes incorporated in this permit renewal may include administrative amendments and/or off-permit changes that occurred during the previous permit term.

- f. Permit Formatting: The permit has been reformatted to organize the applicable requirement with associated monitoring and recordkeeping together, instead of grouping applicable requirements in one section and the monitoring/recordkeeping in the separate sections of the permit. This permit renewal also references newly adopted OAR numbers.

FACILITY DESCRIPTION

3. Kinder Morgan Liquids Terminals, LLC owns and operates two "storage and distribution" terminals in Portland, Oregon. The KM facilities are storage and distribution terminals for petroleum and chemical products, and are classified as "special warehousing and storage facilities for hire" under Standard Industrial Code (SIC) 4226. However, there shall be no conflict or confusion in fact that the exact same regulations applicable to "bulk gasoline terminals" with SIC 5171 are also applicable to KM facilities with SIC 4226.

The Linnton terminal occupies approximately 19 acres of property located at 11400 NW St. Helens Road, and the Willbridge terminal occupies approximately 50 acres of property located at 5880 NW St. Helens Road, about 3 miles southeast of the Linnton terminal. The feasibility of combining the Linnton and Willbridge terminals as one stationary (Title V) source was reviewed and approved in the original Title V permit 26-2028 issued on January 4, 1999.

4. The KM terminals receive a variety of petroleum and chemical products via marine vessels, railroad tank cars, tank trucks, and the Olympic pipeline; then they are distributed via tank cars/trucks and marine vessels, or can be sent back through the Santa Fe Pacific pipeline. Terminals may also receive packaged (solid) materials that can be stored in the warehouse. No product manufacturing or refining takes place at the permitted facility. Blending of certain additives with gasoline may occur at the facility (loading racks) during the winter months when carbon monoxide formation is the greatest. Oxygenated fuels are required in designated control areas as described in OAR 340-204-0090.

The Kinder Morgan terminal is a significant source of VOC emissions, which arise from the terminal operations that include loading tanker trucks and trailers, loading marine vessels (barges and ships), the storage of products, handling and processing of oily wastewater, and the fugitive-leak sources such as pumps, valves, and flanges.

The facility also operates boilers generating fuel combustion by-products (criteria pollutants). The primary function of the boiler is to generate steam that is used to heat viscous liquid to bolster the flow/transfer throughout the piping systems. Other miscellaneous sources of emissions include the fugitive road dust (PM/PM₁₀) attributed to vehicle travel.

5. The permittee has identified one base operating scenario under which the terminal would be operated. There is no need for an alternative operating scenario. Products throughput at the terminal is driven primarily by market factors, and there are no tangible distribution limitations (bottlenecks) other than physical limitations such as pumping rates of the various equipment and the time required for changing outgoing vehicles. The permit PSEL (i.e., PTE) is in effect the only (indirect) operating limitation placed upon the product distribution processes at this terminal.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

6. Emissions units identified in this permit are grouped primarily with respect to the common applicable requirements and considering the (common) monitoring/recordkeeping protocols associated with the applicable requirements. In summary emissions units in this permit are grouped as follow:

Emissions Unit (EU)	EU ID	SCC
Fixed roof storage tanks	FIXTANK	404001-01, 02, 07, 08, etc.
External floating roof storage tanks	EXTANK	404001-11, 16, etc.
Internal floating roof storage tanks	INTANK	404001-11, 16, etc.
Marine/barge loading operations	MLOAD	406002-31, 32, 33, 36, etc.
Tanker truck/trailer loading racks	TRACK	406001-41, 43, etc.
Fugitive emissions; valve, flange, etc.	FGTVOC	40400151
Boilers (fuel combustion sources)	BOILER	10200-602, -502

FIXTANK (Fixed Roof Storage Tanks): This emissions unit represents fixed roof storage tanks existing at the permitted facility. This type of tank generally consists of a cylindrical steel shell with a permanently affixed roof, which may vary in design from cone or dome-shaped to flat.

The Linnton terminal tank farms contain approximately 26 fixed roof storage tanks, while the Willbridge terminal tank farms contain about 150 fixed roof storage tanks. The VOC emissions from a fixed roof storage tank are the sum of breathing losses and working losses, which are function of chemical properties of materials being stored at stored condition and physical design of the tank itself. This holds true for all types of storage tanks including EXTANK and INTANK discussed below.

EXTANK (External Floating Roof Storage Tanks): This emissions unit represents all external floating roof storage tanks existing at the terminal. This type of tank generally consists of a cylindrical shall with an external floating roof that moves vertically with respect to the stored liquid level. The Linnton facility houses two external floating roof tanks (L45028 & L59029) that were installed in 1955. The Willbridge facility does not have any external floating roof storage tanks.

INTANK (Internal Floating Roof Storage Tanks): This emissions unit represents all the internal floating roof storage tanks existing at the permitted facility. INTANK has both a permanent

fixed cone roof and a floating deck inside, which is free to move vertically as the liquid level rises and falls, and either floats on the liquid surface or rests on pontoons several inches above the liquid surface.

The Linnton terminal currently houses six (6) internal floating roof tanks while the Willbridge terminal has eleven (11). The permittee may construct a new internal floating roof tank that will be subject to the INTANK NSPS requirements of 40 CFR Part 60, Subpart Kb. The proposed Title V permit 26-2028 incorporated a pre-approval condition that allows the permittee to convert FIXTANK or EXTANK to INTANK. Once the conversion occurs, the converted INTANK might become subject to the NSPS requirements of 40 CFR Part 60, Subpart Kb, specified in the permit.

The installation of internal floating roof to an existing tank will yield a reduction in VOC emissions. The future project that converts existing FIXTANK or EXTANK to INTANK will not result in an increase in either potential or actual emissions. If the cost of the conversion, installation of internal floating roofs to FIXTANK or EXTANK, is verified and documented to be less than 50% of the cost of building a new internal floating roof storage tank of the same size, the converted INTANK will not become subject to the NSPS requirements of 40 CFR Part 60, Subpart Kb, as the conversion does not meet the definition of modification or reconstruction cited in 40 CFR 60.14 & 60.15.

MLOAD (Marine Loading Operations): This emissions unit represents all marine vessel (ships and barges) loading operations conducted at the marine loading docks and waterways. The liquid product flowing into the receiving container displaces vapors in the vapor space of that container to the atmosphere. The VOC vapors displaced during the marine loading operations at the Linnton terminal are unabated, and therefore the loading operations are limited to non-gasoline products. The marine loading operations at the Willbridge terminal (W-MLOAD) are controlled by Carbon Absorption/Adsorption Vapor Recovery Unit (W-VRU).

TRACK (Tanker Truck/Trailer Loading Racks): This emissions unit represents the tank truck/trailer loading racks used to distribute various petroleum products. Displaced VOC vapors from TRACK are collected and routed to the vapor recovery unit for abatement at both Linnton and Willbridge Terminals.

The Linnton (L-VRU) and Willbridge (W-VRU) units both utilize carbon adsorption/absorption technology to reduce VOC vapors. The L-VRU was tested in May, 1994 and W-VRU in October, 1994. The reported efficiencies of these control devices were 99.1% and 94.4%, respectively. This permit uses the VRU control efficiency to estimate the VOC emissions from the emissions unit TRACK, as specified in the permit. The permit requires the permittee to verify the control efficiency of VRU, in addition to the monitoring, recordkeeping, and reporting requirements associated with the TRACK/VRU operations.

FGTVOC (Fugitive VOC emitting sources): The emissions unit FGTVOC represents fugitive VOC emissions associated with the pipe transport systems consisting of numerous valves, flanges, pumps, sampling ports, and other components through which the VOC vapors escape. The table below lists the number of each component currently existing at the permitted facility.

For the purpose of estimating the VOC emissions, this permit renewal uses (updated) emissions factors published by EPA in November 1995 - Protocol for Equipment Leak Emission Estimates (EPA-453/R95-017).

Current Existing Component "i"	Linnton Terminal		Willbridge Terminal	
	Light Liquid	Gas	Light Liquid	Gas
Valves	393	14	535	29
Pump Seals	10	0	46	2
Compressors and Others	172	8	267	9
Fittings (connectors & flanges)	1184	59	1514	126

BOILER: This emissions unit represents a total of 4 boilers, two at each terminal, which were installed before 1960 and therefore they are not subject to the NSPS-Subpart Dc requirements of 40 CFR 60.40c through 60.48c. Boilers produce steam to heat viscous petroleum products for pipe-transfer. Boilers will burn natural gas as primary fuel and use fuel oil as a back-up fuel:

BOILER Device ID	Manufacturer	Capacity (lbs steam/hr)	Year Installed
L-Boiler1	Titusville	5,021	Pre-1960
L-Boiler2	Gabriel	5,021	Pre-1960
W-Boiler1	Cleaver Brooks	60,000	Pre-1960
W-Boiler2	Cleaver Brooks	45,000	Pre-1960

OIL/W (Oil & Water separators) & Other Miscellaneous Processes: The emissions unit OIL/W represents VOC emissions occurring during the oily-wastewater treatment processes. All terminals employ some form of wastewater treatment so (treated) water effluents can safely be returned to the environment. Oily wastewater are from the withdraws of the tanks, stormwater runoff, and/or cleaning water. The permittee indicates the emissions from OIL/W are categorically insignificant activities because only the stormwater runoff and/or cleaning water (washdowns of paved area) are treated by OIL/W. Treated effluent is discharged to the public water ways, and regulated by the NPDES permit program.

There are also road dust emissions due to vehicle travel on the roads and parking lots within the permitted facility that are identified as FGTPM (Fugitive PM emission sources). Paved roads and paved parking lots within an urban growth boundary are defined in OAR 340-200-0020 as categorically insignificant activities. Insignificant activities are subject to the applicable requirements such as the visible opacity standard, but they are not included in the PSEL.

7. The permittee has identified the following categorically insignificant activities:
 - Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under Divisions 200 through 268 excluding divisions 248 and 262 of this chapter, or less than 0.1% by weight of any carcinogen listed in the US Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year

- Evaporative and tail pipe emissions from on-site motor vehicle operation
- Distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
- Office activities
- Janitorial activities
- Personal care activities
- Groundskeeping activities such as building painting and road and parking lot maintenance
- Instrument calibration
- Maintenance and repair shop
- Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
- Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities
- Temporary construction activities
- Warehouse activities
- Accidental fires
- Air vents from air compressors
- Demineralized water tanks
- Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking (and scheduled tank degassing)
- Electric motors
- Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids
- On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
- Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment
- Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
- Fire suppression and training
- Paved roads and paved parking lots within an urban growth boundary
- Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils
- Health, safety, and emergency response activities
- Emergency generators and pumps used only during loss of primary equipment or utility service
- Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems
- Non-contact steam condensate flash tanks
- Non-contact steam vents on condensate receivers, deaerators and similar equipment

- Boiler blowdown tanks
- Oil/water separators in effluent treatment systems
- Combustion source flame safety purging on startup

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING

8. Oregon Administrative Rules and Federal Rules with specific requirements (e.g., emission limits or standards) that have been determined to be applicable to Kinder Morgan Terminal, along with the associated monitoring, recordkeeping, and reporting that are necessary to determine compliance with the aforementioned applicable requirements are incorporated in the Title-V permit 26-2028. All conditions in the permit are enforceable by both the EPA and State, except for those conditions referenced in Condition 2 of the permit as state-only enforceable.

Facility-wide applicable requirements:

- a. Source Emission Reduction Plan (SERP), OAR 340-206-0050;
- b. Residual and distillate fuel oil sulfur contents, OAR 340-228-0100 & 0110;
- c. Reid Vapor Pressure (RVP) standards applicable to gasoline and gasohol distributed during the ozone season, May 15 through September 15 of each year, OAR 340-0258-0400;
- d. Oxygenated fuel specifications applicable in the winter months of November through February, OAR 340-0258-0110;
- e. Storage tank submersible filling device requirements, state-only enforceable, OAR 340-0208-0560; and
- f. Odor/nuisance standards, state-only enforceable, OAR 340-0208-0640.

Emissions Unit specific Limits/Standards:

- g. Opacity standard of OAR 340-208-0110 and the grain loading limit of OAR 340-228-0210 (1)(b) applicable to boiler;
- h. The fuel oil sulfur limit of OAR 340-228-0100 applicable to boiler;
- i. The operations/maintenance and testing requirements of OAR 340-0232-0090 and 340-0232-0100 applicable to TRACK;
- j. The VOC control requirements outlined in OAR 340-0232-0110 applicable to MLOAD;
- k. Primary and secondary seal requirements and other equipment specifications applicable to external floating roof storage tanks, EXTANK, as outlined in OAR 340-232-0150;
- l. The seal requirements applicable to internal floating roof storage tanks, INTANK, as outlined in OAR 340-0232-0150;
- m. Vapor pressure limit applicable to products stored in FIXTANK with a capacity greater than 39,000 gallons, OAR 340-0232-0150(1); and
- n. The NSPS subpart Kb requirements applicable to INTANK_{NSPS}.

Emissions limits applicable to Insignificant Activities:

- o. The 20% opacity standard (OAR 340-208-0600) and grain loading limits of OAR 340-228-0210 (1)(b) and 340-226-0210(1)(b) applicable to fuel burning and non-fuel burning equipment; the fugitive particulate emissions standard of OAR 340-0208-0210; architectural coating standards of OAR 340-0242-0730 to 0790; Particulate matter (> 250' micron) fall-out standard of OAR 340-0208-0620; and the equipment standard specified at OAR 340-232-0180 are the requirements applicable to insignificant activities.

- 9. Non-Applicable Requirements: The Kinder Morgan facility is not currently subject to any specific National Emission Standards for Hazardous Air Pollutants (NESHAP; 40 CFR Part 61 excluding subpart M – asbestos regulations, and 40 CFR Part 63). 40 CFR Part 61, subpart M could apply if asbestos is found at the facility. Furthermore, as is the case with any Title V sources, the general NESHAP provisions (40 CFR Part 61, subpart A) and the appendices of the federal regulations do apply. A list of non-applicable rules and summary of reasons are provided in the non-applicable requirements section of Title V permit 26-2028.

- 10. Monitoring: Section 70.6(a)(3)(i) requires that all monitoring and analysis procedures or test methods required under applicable requirements be contained in Title V permits. In addition, where the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirement to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. Where compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by a lack of a regular program of monitoring and where periodic testing or monitoring is not otherwise required by the applicable requirement, then in this instance, the status quo (i.e., no monitoring) will meet section 70.6(a)(3)(i).

- 11. As identified earlier in this Review Report, this facility has insignificant emissions units (IEUs) that include categorically insignificant activities and aggregate insignificant emissions, as defined in OAR 340-200-0020. For the most part, the standards that apply to IEUs are for opacity (20% limit) and particulate matter (0.1 gr/dscf limit). The Department does not consider it likely that IEUs could exceed an applicable emissions limit or standard because IEUs are generally equipment or activities that do not have any emission controls (e.g., small natural gas fired space heaters) and do not typically have visible emissions. Since there are no controls, no visible emissions, and the emissions are less than one ton per

year, the Department does not believe that monitoring, recordkeeping, or reporting is necessary for assuring compliance with the standards.

12. Test Methods and Procedures section of the Title V permit is provided so that the permittee and Department will know what test methods should be used to measure pollutant emissions in the event that testing is conducted for any reason. Unless otherwise specifically specified, this section does not by itself require the permittee to conduct any more testing than was previously included in the permit. Although the permit may not require testing because other routine monitoring is used to determine compliance, the Department and EPA always have the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct testing to confirm the compliance status. In either case, the methods to be used for testing in the event that testing is conducted are included in the permit. This is true for SIP as well as NSPS emission limits and standards.
13. Recordkeeping requirements in this permit are drafted pursuant to OAR 340-218-0050(3)(b). Unless otherwise specified, the records of all monitoring specified in the Oregon Title-V Operating Permit 26-2028 must be kept at the plant site for at least 5 years. All records necessary to determine compliance with any permit condition shall be made available to the DEQ/EPA inspectors upon request.
14. Reporting requirements in this permit are drafted pursuant to OAR 340-218-0050(3)(c). The semi-annual reports are for certifying compliance with the permit requirements. The annual report consists of the second semi-annual compliance certification; in addition to the product throughputs, fuel usage, and other relevant data needed to determine compliance with the annual PSEL and other applicable requirements specified in the permit. There are also monthly RVP reports required to be submitted during the ozone season.

PLANT SITE EMISSION LIMITS

15. Baseline Emission Rate:

- a. The baseline emissions associated with marine loading operations (MLOAD) are based on the baseline year throughput of gasoline and other petroleum products:

Emissions Unit	Material throughput (gallons/yr)	Baseline Emissions (tons/yr)
L-MLOAD	22,104,600	44.2
W-MLOAD	---	56.4
MLOAD (total)	---	100.6

Assumption: Non-gasoline products were loaded into the vessels that were not gas-fired, and therefore not exempted from the MLOAD regulations, OAR 340-232-0110(2)(c).

Pursuant to OAR 340-222-0043(2)(b), the baseline emission rate for MLOAD is adjusted down with respect to the MLOAD vapor control emission limit of 95% (by weight)

specified at OAR 340-232-0110 that became effective on June 1, 2001. The adjusted baseline MLOAD PSEL is 5 tons per year:

$$\text{Adjusted Baseline PSEL}_{\text{MLOAD}} = 100.6 \times (1 - 0.95) = 5.0 \text{ tons/yr}$$

- b. The baseline fugitive emissions from material handling equipment (FGTVOC) are updated in this permit review period:

Baseline Component "i"	Linnton Terminal		Willbridge Terminal	
	Light Liquid	Gas	Light Liquid	Gas
Valves	393	14	529	29
Pump Seals	10	0	46	2
Compressors and Others	172	8	267	9
Fittings (connectors & flanges)	1180	59	1505	126

Applying the Protocol for Equipment Leak Emission Estimates published in the EPA-November 1995 document (EPA-453/R-95-017) to the number of FGTVOC components that existed during the baseline period yield the baseline FGTVOC emissions of 1.5 tons:

Component "i"	Light Liquid EF (lbs/hr-comp.)	Gas EF (lbs/hr-comp.)
Valves	9.44×10^{-5}	2.85×10^{-5}
Pump Seals	1.19×10^{-3}	1.43×10^{-4}
Compressors and Others	2.85×10^{-4}	2.63×10^{-4}
Fittings (connectors & flanges)	1.76×10^{-5}	9.22×10^{-5}
FGTVOC Total:	1.53 tons/yr	

- c. The RACT adjusted baseline emissions rates for TRACK and storage tanks (FIXTANK, EXTANK, INTANK), as originally estimated in previously issued (now extinct) Air Contaminant Discharge Permit 26-2479 and ACDP 26-2028, are retained in this Title V permit.

Uncontrolled baseline VOC emissions from the storage tanks at the Willbridge terminal were 838.1 tons/yr, according to the PSEL detail sheets dated 1/18/83. Applying 95% reduction to these storage tank emissions yields a RACT reduction of 796.2 tons/yr. The adjusted baseline PSEL for the storage tanks and the truck/trailer loading racks are as follows, including fugitive emissions associated with truck/trailer loading operations:

ACDP	Actual Baseline (tons/yr)	RACT reduction (tons/yr)	Adjusted Baseline (tons/yr)
Linnton terminal	302.89	-242.3	60.6
Willbridge terminal	1167.99	-250.7 for TRACK -796.2 for tanks	121.1
L-TRACK fugitive	Gasoline throughput of 111,890,000 gallons (EF = 10.79×10^{-2} lb/10 ³ gal)		6.04

W-TRACK fugitive	Gasoline throughput of 115,769,000 gallons (EF = 10.79×10^{-2} lb/10 ³ gal)	6.25
Baseline (total):		194.0

- d. The VOC emissions from other miscellaneous activities during the baseline period include emissions associated with the Air Still blowing operations that have been discontinued:

Air Flow = 1000 scfm = 526×10^6 scf/yr

Avg. VOC content of fumes = 0.1%

Assume density of fumes is equivalent to air = 0.07516 lbs/ft³

Estimated control efficiency of boiler = 80%

VOC Emissions $\cong (526 \times 10^6 \text{ ft}^3/\text{yr}) (0.07516 \text{ lbs/ft}^3) (.001) (1 - 80\%/100\%) = 4 \text{ tons/yr}$

- e. The baseline BOILER emission rates (tons/yr) were based on approximately 3.1 million gallons of residual fuel oil used in 1978 and AP42 emissions factors for industrial (10 to 100 MMBtu/hr) boiler:

Pollutant:	PM ₁₀	SO ₂	NO _x	CO	VOC
Tons/yr:	29	420	84	8	0.4

- f. In summary, the plant-wide baseline emission rates adjusted down with respect to the Department rules are the following:

Pollutant:	PM ₁₀	SO ₂	NO _x	CO	VOC
Tons/yr:	29	420	84	8	205

16. Proposed PSEL Information:

- a. The annual VOC PSEL proposed for storage tanks FIXTANK, EXTANK, and INTANK remain the same as in the expiring permit. The permittee estimated about 20.6 tons/yr come from Linnton tank farms and about 79 tons would be emitted from the Willbridge tank farms.
- b. The annual VOC PSEL proposed for TRACK is based on gasoline throughput rates forecasted by the permittee and using the same methods (e.g., AP42 & API EF) used to establish the baseline PSEL. Fugitive emissions associated with truck/trailer gasoline loading operations L-TRACK (6.3 tons/yr) and W-TRACK (14.35 tons/yr) are also included:

Product	Linnton Throughput (gallons/yr)	Willbridge Throughput (gallons/yr)
Gasoline	116,671,872	265,926,749
Fugitive Emissions	6.3 tons VOC	14.35 tons VOC
Total (tons/yr):		95.4

- c. The emissions from MLOAD based on the projected gasoline and petroleum products throughput total about 38.4 tons/yr:

Product	Linnton Throughput (gallons/yr)	Willbridge Throughput (gallons/yr)
Gasoline	"Zero"	310,000,000
Kerosene/Jet Fuel	50,000,000	150,000,000
Distillate No.2 Fuel	150,000,000	280,000,000
Residual No.6 Fuel	50,000,000	50,000,000
Naphtha	1,000,000	1,000,000
VGO	19,000,000	19,000,000
Ethanol	1,000,000	1,000,000
Total (tons/yr):		38.4

- d. Fugitive emissions from material handling equipment (FGTVOC) total 1.5 tons per year, which are based on the number of FGTVOC components currently existing at the facility (see item 6 of this review report) and the same EPA emission factor (see item 15.b) used to establish the baseline FGTVOC emissions rate.
- e. The BOILER emissions rate proposed by Kinder Morgan are based on the annual fuel usage of 750.72 thousand gallons of residual oil and 463.86 million cubic feet of natural gas, and utilizing updated AP42 and DEQ emission factors:

Pollutant:	PM ₁₀	SO ₂	NO _x	CO	VOC
Proposed (tons/yr):	.8	104	44	21	1.4

17. Proposed PSEL Summary:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM ₁₀	29	29	29	29	29	--
SO ₂	420	420	420	420	420	--
NO _x	84	84	84	84	84	--

CO	8	8	8	10	99	89
VOC	299	299	205	321.5 *	236	--

* The VOC PSEL of 321.5 tons/yr established in the expiring/previous permit was set prior to adaptation of the marine loading rules, OAR 340-232-0110, which became effective on June 1, 2001.

- a. Generic Level PSEL for CO: The CO PSEL (99 tons/yr) established in the proposed permit is greater than the amount requested by the permittee, and it is also higher than the PSEL set forth in the expiring (Title V) permit. The recently adopted Department rules no longer support PSEL less than the general level PSEL. Pursuant to OAR 340-222-0040, a source that does not have the capacity to emit certain pollutant at the level below the Significant Emission Rate (SER) receives a generic level PSEL. The generic PSEL level for a pollutant is equal to the Significant Emission Rate (SER) for that pollutant minus 1 ton.
- b. Proposed PM₁₀, SO₂, NO_x PSEL that includes unassigned emissions is set equal to their respective baseline emissions rate. After July 1, 2007, any unassigned emissions greater than SER are reduced to the SER level.
- c. Netting basis for pollutants PM₁₀, SO₂, NO_x, and CO equals the actual baseline PSEL. For pollutant VOC, the netting basis equals the actual baseline emissions rate adjusted down with respect to the marine loading rules.
- d. Short-term PSEL: No short-term SER exist for any of the regulated pollutants in the area where the facility is located. Pursuant to OAR 340-222-0042, no short-term PSEL is established in this permit. The monitoring requirements associated with the (previous) short-term PSEL are also no longer needed.
- e. PSEL Compliance: OAR 340-222-0080 requires the averaging period for PSEL to be calculated on a rolling 12-month basis. Performing the annual emissions calculation once during the calendar year is no longer adequate. The annual emissions for the previous 12-month period must be calculated at the end of each calendar month, for a total of 12 times during the calendar year.
- f. The PSEL is a federally enforceable limit on the potential to emit.

18. The permit includes following unassigned emissions (tons/yr):

Pollutant:	PM ₁₀	SO ₂	NO _x	CO	VOC
Unassigned:	15	316	40	0	0
Emission Reduction Credit:	0	0	0	0	0

- a. Unassigned emissions equal the (previous) netting basis minus the source's current PTE/PSEL, minus any banked emission reduction credits (zero).

- b. Any unassigned emissions in excess of the (pollutant specific) SER expires on July 1, 2007 in accordance with OAR 340-222-0045 (5).

Pollutant	Current Unassigned Emissions (tons/yr)	7/01/2007 Unassigned Emissions (tons/yr)
SO ₂	316	40

19. Significant Emission Rate

The cumulative increases since the baseline for all criteria pollutants are less than the Significant Emission Rate (SER) as defined in OAR 340-200-0020 (Table 2). For the purpose of comparing the cumulative PSEL increases since the baseline to SER, aggregate emissions limit of 1 ton/yr for each of the criteria pollutants are excluded, since it is assumed the similar insignificant activities existed during baseline.

Pollutant	Baseline PSEL (tons/yr)	Proposed PSEL* (tons/yr)	Increase (tons/yr)	SER (tons/yr)
PM ₁₀	29	14	--	15
SO ₂	420	104	--	40
NO _x	84	44	--	40
CO	8	99	91	100
VOC	205	236	31	40

* Excluding unassigned emissions.

20. Aggregate Insignificant Emissions

The permit does not limit "aggregate insignificant activities" to only those activities identified in the permit application. No groups of activities are identified in the permit for the sole purpose of identifying insignificant activities, which tend to be a moving target. The rules allow the permittee to add more insignificant activities to their existing aggregate source list, provided the aggregate emissions of any individual (regulated) pollutant do not exceed the (rule) aggregate insignificant limit of 1 ton/yr.

HAZARDOUS AIR POLLUTANTS

21. The Kinder Morgan facility is a minor source of hazardous air pollutants (HAPs) because the estimated potential emissions of all individual HAP is less than the 10 tons/yr threshold and the aggregate HAPs emission is less than the 25 tons/yr threshold.

HAP	CAS No.	PTE	HAP	CAS No.	PTE
Benzene	71432	3.52	M-xylene	108383	2.36
Ethylbenzene	100414	0.47	O-xylene	95476	
Hexane	110543	4.22	P-xylene	106423	
Toluene	108883	4.69			
Total Aggregate HAPs (tons/yr):					15.26

While the facility is a minor source of HAPs, the permittee needs to document and retain records showing that the facility is not a major HAP source. The method (equation) specified at 40 CFR 63.420 (a)(1) can be used for this purpose. The alternative is to retain the Title V permit application that shows that the facility is a minor source of HAPs, pursuant to 40 CFR 63.420(a)(2):

22. Toxic and Flammable Substance Usage for Accidental Release Prevention

CAS NUMBER	CHEMICAL NAME	ESTIMATED ANNUAL USAGE (lbs)			
		1,001 - 10,000	10,001 - 20,000	20,001 - 50,000	> 50,000
71432	Benzene				X
108883	Toluene				X
100414	Ethylbenzene				X
95476	O-xylene				X
108383	M-xylene				X
106423	P-xylene				X
110543	Hexane				X

GENERAL BACKGROUND INFORMATION

23. Other permits issued or required by the Department of Environmental Quality for this source include the Willbridge Terminal's NPDES permit (NPDES 1300-J) and the Linnton Terminal's NPDES 1300-J. Both sources are not registered with the Department as a hazardous waste (HW) generator.
24. A Land Use Compatibility Statement signed by the City of Portland on 4/19/95 granted unconditional approval of the facility operations.

25. The source is located in a maintenance area for ozone and Carbon Monoxide (CO). The permitted facility is a major (> 100 tons/yr) source of Volatile Organic Compounds (ozone precursor), but is a minor (< 100 tons/yr) source of CO. The area is in attainment for all other criteria pollutants.

COMPLIANCE HISTORY

26. The facility inspections conducted by the Department staff on August 26, 2003 found the permittee to be in compliance with the Title-V permit terms. The Department has no record of any public complaints filed against this source.

PUBLIC NOTICE

27. Pursuant to OAR 340-218-0210, the Department provided category-III public notice in accordance with procedures outlined in OAR 340-209-0030. The draft permit was placed on public notice from September 12, 2003 to October 20, 2003 to allow any interested public to submit comments. The Department did not receive any comments from the public. Following the public notice period, the proposed permit was forwarded to EPA for their 45-day review, which ended on December 5, 2003. EPA did not provide any comments to the proposed permit.

Pollutant	Existing PSEL	Proposed PSEL	Increase Proposed
PM ₁₀	29	29	--
SO ₂	420	420	--
NO _x	84	84	--
CO	10	99	89
VOC	321.5 *	236	--

* The VOC PSEL of 321.5 tons/yr established in the expiring/previous permit was set prior to adaptation of the marine loading rules, OAR 340-232-0110, which became effective on June 1, 2001.

The increases in annual (Boilers) PSEL for CO does not represent actual increase in boiler emissions. The new Department rules (OAR 340-222-0040) regarding annual PSEL no longer support the PSEL less than the generic level (SER minus 1 ton/yr), and the PSEL increases proposed in this permit renewal are strictly to support the Department PSEL rules. The boiler emissions based on the actual projected fuel usage are listed at the end of this permit review report.

<u>BOILER EMISSIONS DATA</u>			
Fuel Usage:	Natural Gas	Fuel Oil	
	<u>(MM.scf)</u>	<u>(M. gallon)</u>	
Annual Usage:	463.86	750.72	
<u>Emissions Factor</u>	Natural Gas	Fuel Oil	Projected
	<u>(lb/10⁶ ft³)</u>	<u>(lb/10³ gal)</u>	Annual Emission
PM ₁₀	2.5	19.3	8
SO ₂	1.7	274.8	104
NO _x	100	55	44
CO	84	5	21
VOC	5.5	0.28	1.4